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# HISTORY OF GREEK PHILOSOPHY

## THALES TO DEMOCRITUS

BY

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## DEDICATION

To my friends, my former pupils, who inspired this book by their difficulties and questions, and who will find in it little or nothing that I did not tell them.

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# CONTENTS


| CHAPTER | | PAGE |
|---|---|---|
| | Preface | ix |
| I. | What is Philosophy? | 1 |
| II. | Greek Religion | 19 |
| III. | The School of Miletus, the First Philosophers | 76 |
| IV. | Pythagoras and the Pythagoreans | 103 |
| V. | Heracleitus | 118 |
| VI. | The Eleatic School | 143 |
| VII. | The Pluralists | 180 |
| VIII. | Summary | 255 |
| Appendix I. | Chronological Table | 269 |
| II. | Bibliography | 279 |
| | Index | 283 |

# PREFACE

To add another to the numerous histories of Greek Philosophy available in English may seem uncalled for and imprudent, if not downright impertinent. The books already at hand are excellent, and, it would appear, sufficient. The more detailed and critical are standard and exhaustive works of reference and of advanced instruction; the shorter and the more concise serve to aid and refresh the memory, or to give an accurate small scale map, easily readable to the practised or interested eye. But the fact remains that however invaluable they may be to one already familiar with the subject, or born with a natural bent for it and therefore quick to understand its problems and tolerate its terminology, they prove too learned, too technical, or too bloodless and in the nature of a text-book, for the use and pleasure of the "general reader." They are apt to give merely the plan without the panorama which infuses it with color and shape and animation. Or else they confuse the untrained observer with the spectacle of the novelty, the wealth, the tropical luxuriance of a vast and incredible landscape teeming with the strange forms of a monstrous fauna and flora, in which everything familiar seems turned topsy-turvy. And in either case they assume, deliberately or unconsciously, a previous knowledge of philosophy, or an already awakened flair for philosophic imaginings and speculations such as shall prepare the reader to follow with sympathy and understanding minute and elaborate discussions, or at least enable him to make the often over-dry bones of rapid and highly condensed accounts live.

For example, many American university curricula are faced with the problem of acquainting, wholesale and in the brief term of a semester, large numbers of innocent and incurious

youths with what every young man should know about the history of Greek Philosophy. And this problem, hard at the best, is not a little aggravated, so far as my experience, which I fancy to be fairly typical, goes, by the difficulty of finding any book sufficiently untechnical and vivid to supplement the teacher's lectures and arouse the understanding and the interest of his pupils. Again, one is frequently not a little embarrassed and at a loss for an answer, when indiscreet friends among "the general public" come with a modest disclaimer of any knowledge of philosophy save a certainty that it is "beyond them," and ask for the name of some work which may instruct them without too greatly straining their limited powers of comprehension.

In the present volume I have tried to meet this want so far as the early Greek philosophers are concerned, and to get under way with a simple, painless, and, I hope, not unentertaining history of Greek Philosophy as a whole. I am encouraged to this attempt by my own feeling that philosophy is not really the impossibly abstract, abstruse, cold, and difficult thing of the popular imagination, but rather something essentially warm, close, nay, clinging to everyday life, highly colored, melodramatic, and naturally provocative and engrossing. And with this feeling goes the opinion that its history is the story of perhaps the most exciting and sensational pursuit with which the human mind has diverted as well as ennobled itself. If I shall have succeeded in insinuating that philosophy is not so dull and respectable after all, and in troubling the reader, however vaguely, with something of its fascination, I shall feel that I have done what—apart from amusing myself—I set out to do.

This volume is based upon other histories, and so far as I know, there is nothing original in it. The sources have been before me, but I have tried to rely entirely upon the interpretation of them given by such historians as, for instance, Zeller, Gomperz, and Professor Burnet. I do not see that at the present time anything new can be said, except by experts, and it has been my aim merely to rehash in a lighter and more easily digested form what they have already thrashed out and pre-

pared. Where divergencies of opinion and interpretation exist, they have been noted, but no side has been taken. Furthermore, I have wished to be quite unpartisan. Being devoid of any "system," or even strong conviction—save, perhaps, that the growth of philosophic speculation, as well as the evolution of the Universe and the course of human events, is without culmination—my mental furniture lacks that Procrustean bed of a fixed point of rest and reference upon which the history of philosophy is sometimes stretched. I have no child or even pet view of my own, for which to seek forerunners in the wilderness among the ancients. At the same time, it has not been my intention to take a severely objective and impartial attitude. I have sought rather to be thoroughly partial to each new system, to imagine myself the disciple, not the critic, of the successive philosophers with whom I have dealt, to make all their ideas as plausible as I can, and in general to say as much good and as little ill as possible about everybody and everything.

Two bibliographies have been appended, dealing respectively with Greek Religion and Early Greek Philosophy, as well as a chronological table, which may be useful for framing philosophical, with their setting of historical, events. The bibliographies make no pretence at being complete. They include only such books as I myself happen to have found useful, and betray, if anything, the limitations of my library.

Practically all the translations, and the major part of the interpretation, have been taken from Professor Burnet's "Early Greek Philosophy," and his "Greek Philosophy Part I. Thales to Plato." My thanks are due to the publishers for having in my absence kindly reviewed the translations taken from "Early Greek Philosophy" and verified them in accordance with the third edition (1920). I am indebted to many friends for reading parts of the manuscript, and among them particularly to Professors J. H. Woods and R. B. Perry of Harvard University, who have made many helpful suggestions; also to Mr. E. A. Mowrer, Roman correspondent of the *Chicago Daily News*, to Mrs. Mowrer, and to Mr. A. L. de Bosis, for the time and trouble that they have so generously given to reading the

proofs. The portion of Chapter II dealing with the Eleusinian and Orphic Mysteries has already appeared, with some alterations, in the *Hibbert Journal* for October, 1922, and I must acknowledge the kindness of the Editor, Dr. Jacks, in allowing me to republish it.

B. A. G. F.

Rome, April, 1923.

# HISTORY OF GREEK PHILOSOPHY

## CHAPTER I

## WHAT IS PHILOSOPHY?

THERE are few of us who, at one time or another, have not found ourselves speculating about the character and daily existence of some chance individual seated opposite us in a tram or railway car, and making up some story about him to fit and explain his looks and behavior. It may be merely the natural curiosity about other people's business with which we are all endowed, that attracts and holds our attention, or it may be something odd and interesting in our subject's appearance that puzzles and challenges us. But whatever the grounds of our interest, they are apt to impel us to construct deliberately or insensibly—especially if the journey be long and tedious, and we lack other means of entertainment—a picture of what this odd, or charming, or commonplace individual is really like.

It is obvious, however, that the trend of our questions will be determined not by the look of our hero alone. Our own personal interests and the impossibility of studying every side of his character in the brief course of our journey will have much to do with determining and limiting the nature of our speculations. Still, if we confine our interest and investigation either by instinct or by choice, we shall be obliged to admit that our point of view is only partial, that our hero possesses other sides to his character—other selves, we might say—than the particular self with which we were dealing. But these other sides or selves also are equally part of him, and inasmuch as they are also expressions of what we might call his central

or total personality, they have equally to be taken into account in making a true and inclusive picture or story of his total life and character.

Now we are all of us seated for a journey that sometimes lasts for many years opposite a fellow-traveler towards whom we cannot feel, or even pretend to feel, indifference. We are strapped into our seats, and we cannot turn our heads away, but must perforce stare at him all our life long, and only death can free us from the otherwise unescapable fact of his presence. And that presence is all-engrossing. We would not keep our eyes off him if we could, so strange, so self-contradictory, so baffling, and so full of challenge are his appearance and behavior. His expression is ever changing—now kindly, now cruel, now sad, now gay, now full of encouragement, now of menace, and now again of a great and weary indifference. This strange Being, in those moments of almost personal contact when he returns our fascinated stare, and meets our eye with something of intelligence or friendliness or hostility in his face, we call Life spelled with a capital L. In his more impersonal phases of unresponsiveness and aloofness, when we feel less on Christian-name terms with him, we are apt to call him the World, or the Universe, or Reality, or on even very correct and formal occasions, the Absolute.

We can no more escape an interest in the nature of this Universe or Reality with which we are surrounded and confronted at every turn, than we can the fact of its presence. There is in the first place the blank surprise produced by the mere fact of finding one's self alive and tête-à-tête with a World. Through wondering, says Aristotle, men began in the beginning, and, we might add, begin to-day, to philosophize. But this round-eyed wonder speedily turns into a keen-eyed and sophisticated curiosity. The Universe is not only astonishing, it is perplexing. It puzzles and intrigues us. We begin to suspect that it is not altogether what it seems. It may have private affairs. It may lead a double life, the life of what it appears to be in public and the life of what it really is in private. At the mention of a double life we are naturally all agog, and begin to philosophize spontaneously. As we begin

to pry into the affairs of the Universe, we find our suspicions confirmed. Its affairs are more private and more difficult to get at than we had supposed. Idle speculation and gossip will get us nowhere. The behavior and appearance of the World present a problem, a riddle, and perhaps a case for the police. It is more and more obvious that there is a mystery, and that the Universe does not wear its heart on its sleeve. Behind the Universe as it appears in public there is the Universe at home—an inner nature and constitution of things which, if only we could penetrate to it, might be found to explain all the various and apparently conflicting activities and aims which confuse and complicate the surface of the World.

In this standing invitation to discover what the inner life of the Universe is like lies a perpetual challenge to the amateur detective that lives and moves and has its being in every one of us. Idle curiosity is reinforced by the no less primeval passion for hunting down a quarry. We are not only prying into the private affairs of a very mysterious and extraordinary Being, we are also stalking a prey. But once off on the scent, we find that we are embarked on an adventure the difficulty and wildness of which is beyond that of any big game or man hunt ever undertaken by a Roosevelt or a Sherlock Holmes. No wild beast, no criminal in fact or fiction, not even Arsène Lupin himself, ever displayed half the genius for covering his tracks and setting false trails, and escaping just at the moment when finally the net seemed closing—nay closed—about him, as does the true character of the Universe in eluding our pursuit. Just when we think that at last we have grasped it, it slips through our fingers. However careful and complete our story or theory is, some fact has escaped or contradicts it. But humanity takes up the repeated challenge, laying its plans each time more carefully, and spreading its nets more and more widely and with finer meshes. Hence the fact that philosophy has a history, and on the whole progresses.

It is, however, not merely for the sake of entertainment, and for the mere fun of turning someone else's private life into a public scandal, or of doing amateur detective work, that we find ourselves speculating about the hidden nature of the

World. That desire to know, with which Aristotle said all men were endowed by nature, has also a sound practical basis. We are not only spectators of our world but actors in it. And the way in which we act is a matter of life and death to us. The Universe is not only a tough-looking, but a tough-acting, customer. We have to be continually on our guard against it, and the length of time for which we can successfully maintain that guard is dependent upon our ability to foresee what the World will do next. This ability, again, varies in proportion to the correctness of our guess as to what the character and motives of the World—what its machinery or its psychology, we might almost say—are really like.

Huxley has likened this relation of man to the World to that of a chess-player pitted against an unseen opponent. This opponent will beat us all in the end, to be sure, but by skilful play some of us can postpone the inevitable for some three score and ten or four score years. Meantime our antagonist plays fair and according to fixed rules. He never overlooks or fails to take advantage of an error on our part, but on the other hand he never fails to recognize and accept a check. The success with which we delay defeat is measured by our understanding of his game, for that understanding gives us an insight into what probably will be his next move, and thus puts us in a position to forestall or counteract it.

Knowledge then is not merely enjoyable and exciting; it is useful. It is power, as Bacon said, because through understanding Nature we are able to overcome her, in part through obedience to her ways when and where they cannot be changed, in part through the deliberate exploitation of her forces and the turning of them to our service and advantage. "To submit to fate and serve God is to rule." *(Fato obedire, Deo servire, regnare est.)* These lines, scratched on the walls of a cell in the Tower of London, suffice to set forth a whole philosophy of Life. To realize the limitations of one's own nature and of the nature of things of which one is a part, and within these limitations to seek to make the Good sovereign and the Ideal real, are the conditions of human dignity and of our mastery of the world. But to know God from Fate, to distinguish that

which is perforce unalterable from that which perhaps may be changed and bettered and recast in the image of the divine, is at the same time the most useful and the most philosophic of all knowledge.

We are now ready, I think, to answer the question which forms the title of this chapter. Philosophy is inquiry into the real nature of the Universe in which we live. It is merely an extension of natural curiosity from other people's private affairs to other things' private affairs, and to the private affairs of this lump sum of all people and all things, which we call the World. We know more or less what Reality looks like and how it behaves in public. But what is it like at home? Under the third degree? To its valet? Philosophers, then, are essentially busybodies and detectives, but on a large scale and with the grand manner. Their problem is to find out the truth, if they can, about the totality of existence. They ransack all space and all time for their evidence. But at the same time they can leave nothing untouched in their search. Every feature and movement of the World is a clue. They must scrutinize every past and passing event. Nothing can be a matter of indifference to them, if they are to frame with any measure of success a theory which will fit and explain all the facts in this immensely complicated and mysterious Case, which the existence and nature of the Universe present.

A philosophic system, then, is simply the story made up by the philosopher to account for the looks and behavior of this strange Being, the World, with which he finds himself confronted. Of our friend in the tram-car we might seek corroboration of our speculations concerning him, if we were impertinent to the point of asking him outright. But there is no such short-cut to knowledge of the truth about the Universe. The Universe is deaf and dumb, or else reticent enough to pass for such. It reveals to us directly nothing of its inward self. It has nothing to say in response to our attempted interviews. It neither affirms nor denies the correctness of our guesses. No confession of its real character can be wrung from it. All the evidence a philosopher has for writing up his story is circumstantial. The only clue to what the nature of things is

really like is to be found in their appearance. And, to change the figure slightly, the verification of the correctness of our conclusion as to the true inwardness of the behavior of the Universe does not mean that Reality has finally owned up to feeling as from its behavior we suspected it did, but simply that it has gone on exhibiting without contra-indication the same symptoms upon which our diagnosis was originally founded.

But our diagnosis, of course, may be and is simply one of many. Doctors of medicine may, doctors of philosophy do, disagree, and compared with the disagreements of the philosophers over the real, inner condition of Reality, the differences of physicians in consultation over an interesting and baffling case are a chorus of unanimity. So far as the philosophic problem is concerned, everybody is entitled to his guess. There is no authority, no court of final appeal, no expert opinion even, to give a decision to which the inquiring mind must bow. At the same time this liberty is not license. We must not guess merely at random. Our opinions must be dictated not by our fancies or hopes, but by the facts of the case. Here lies the World before us, and the question is not what theory regarding it is prettiest and nicest and most edifying, but rather what theory about the nature of things best fits their actual look and behavior. Everybody then is bound to give reasons for his guess, and to show if he can that his particular guess is more in accord with the evidence than any other.

The absence of eye-witnesses to the private life of the Universe imposes upon philosophers a peculiar carefulness in their research. At every step their results have to be checked up by the data provided by the actions and appearance of the World, and conformed to them, lest what aims at being a plausible theory and explanation deteriorate into unfounded gossip or even out and out libel based upon personal prejudice. We might liken the philosopher in this respect to the artist who in painting the picture of a landscape has to keep raising his eyes from his canvas to his subject, in order to be sure that he is catching the spirit of the landscape as it is, and not substituting a sketch of objects and values composed as he would prefer

them. Or again we may liken him to the scientist whose suppositions or hypotheses regarding the constitution of the physical world must never for an instant lose touch with the phenomena upon which they are based. The moment that a scientific theory ignores any fact within its sphere, it is in danger; the moment that any fact declines to fit it, it is doomed. In the same way, if the philosopher, who, as Plato says, has to be the spectator of all time and existence, fails to note any aspect or action of the World, his system is inadequate; if he will not bring it into conformity with events, it is untenable.

Indeed, the method and the tests employed by philosophy should differ in no wise from those of science. A philosophy is an interpretation of the Universe based upon existence as we find it, and maintains its validity so long, and in so far, as it keeps itself fitted to the facts and events which go to make up the phenomenal world. But the scope of philosophy is wider than that of a science. It will be remembered that in speaking of our fellow-traveler in the tram-car we pointed out that our speculations regarding him might perhaps be restricted to some one particular side of his character in which we happened to be specially interested, or, on the other hand, might deal with the whole man. Now, in the same way, the scientist is one who devotes himself to the study of a single aspect of the Universe. As things stand, the World happens to present a number of sides which can be investigated comparatively independently of one another. We can, for example, more or less isolate the physical or material side of the Universe, and study it. And this aspect of things we may again subdivide, and study in detail, making it the object of such semi-independent spheres of research as physics, chemistry, mechanics, astronomy, geology, and the like. Or again we may investigate the activities of living matter, without for the moment bothering with physics and mechanics or even chemistry, and by subdividing our subject separate the provinces of the various biological sciences from one another. Or yet again we may turn the microscope upon our own inner experience, and inquire as mere psychologists into the nature and behavior of consciousness, without concerning ourselves with biological sciences

or chemistry. We may even within the field of consciousness confine ourselves to a particular problem such as that presented by the fact that consciousness among other things displays preferences, likes this, and dislikes that, pursues what it likes, avoids what it dislikes, and in general makes the distinction between good and evil, creates values, and conducts itself accordingly. Then our interest is that of the moralist or student of ethics, in determining what the human Good really is, and what kind of conduct is best calculated to realize it. We may, however, not bother about the question of moral values, but turn our attention simply to the study of the behavior of our mind when it is in the process of what we call thinking or reasoning, and attempt to make out a description of what that process is like. In that case we have decided to restrict ourselves to logic, and to leave ethical questions to others. If, however, we persist in being interested in and speculating about the nature of the whole World, of which these various aspects and sides are parts and manifestations, and in making up a story or theory about its character which will include and explain *all* the manifold activities and characteristics which it presents to us, we are then philosophers, rather than physicists or chemists or psychologists or logicians.

Of course no scientist, and for that matter no one whosoever, can wholly avoid this central philosophic question. The various aspects of the World treated by the scientists cannot, since they are parts of one whole, be wholly isolated from one another. Sooner or later investigation of any one of them will confront us with problems the solution of which has to be sought beyond its borders. For instance, the psychologist in the end can scarcely evade the question of the relation of the mind to the body, and generally of consciousness to matter. Some people, indeed, think that the problem of consciousness can be immensely simplified if only its behavior can be dealt with in the same terms as simplify and render intelligible the behavior of the physical world; that is, if only we can reduce it to a form of mechanical energy. In the same way the biologist cannot well avoid the subject of chemistry. It is an open question whether or no life can be understood in terms

of chemical activity; that is, whether biology is not just a branch of chemistry. Similarly a study of chemistry in the end tends to involve questions which the physicist has made his special province. Chemists ask themselves whether the differences and relations between the various chemical elements are not capable of further reduction—of being detected and caught in the act, as it were, of being after all only different groupings, in this or that geometrical relation, of qualitatively similar atoms or electrons or ions, or whatever the ultimate unit of matter may be.

If we could carry out this particular series of reductions, we should of course immensely simplify our world. Its whole behavior could then be expressed in the comparatively uncomplicated formulæ which describe the behavior of matter in motion. But this reduction is far from being attained, and even if it were, our troubles would not be over. For physics itself takes certain facts such as space and time and motion pretty much for granted, and does not bother to analyze them. And it has been held that these aspects of the World are not really founded in the outside Universe at all, but are merely our ways of perceiving things—forms of the activity of our consciousness like our senses, which alter and change the real nature of the outside world, as colored glasses alter for the eye the real colors of a landscape. In fact, it has even been held that the whole so-called physical and material aspect of the World can be understood in terms of consciousness. After all, what are time and space but ways in which we experience? We get our perceptions one after another, or we get several presented side by side, and we call this sequence and coexistence; which are universal characteristics of our presentations, time and space. Furthermore what is the material world but just a lump sum of sensations and experiences of different sorts? Try to get outside the World as it is given to your senses and your thoughts. Try to get outside your experience. It is like trying to get out of your own skin. You can get more experience—have more *in* your consciousness—just as you can expand your skin and grow fat. But although your periphery may be extended in either case, you are still shut up within the

vicious circle, mental or physical. Therefore, some philosophers argue, the least common denominator of the sum total of existence which we are seeking is to be found in terms of consciousness. And so we find ourselves back again precisely where we started.

I have mentioned these different arguments and points of view simply to show how quickly all our questionings, even the most simple, land us on difficult and debatable ground. Philosophy is sometimes reproached with being remote from life, but in reality nothing is closer and more intimately interwoven with everyday existence. To ask the simplest or the most trivial question about anything, is to set on foot an inquiry into the nature of the World. To indulge in an instant of reflection is to embark on a train of thought whose ultimate destination is a philosophic system. The fall of an apple in an orchard seems a homely and simple enough occurrence, yet Newton found himself unable to deal with it satisfactorily till, after long research and meditation, he had formulated the law of gravitation. But even Newton got out at a way-station, so to speak. For the law of gravitation itself suggests many further problems. What is the scope of the law? What warrant have we for supposing that it applies everywhere, that it always has applied, that it always will apply? How do we know—for that matter, do we know, that there may not be vast tracts of space where bodies do not attract each other in direct proportion to their masses and in inverse ratio to the square of their distances, but rather according to some quite different formula, or perhaps not at all? Anyway, why should the formula remain the same even for us in the future, or why should we not believe that bodies may altogether outgrow their present habit of attracting each other? Is the law of gravitation, when all is said and done, more than a mere snap-shot of the way in which bodies happen to be behaving at the present time? Can it be said in any way to prescribe, or more than provisionally and roughly to describe, how they shall behave? And what of all the other laws and concepts with which the sciences have familiarized us? What ground, if any, have we for supposing that they hold good for all space and all time? Thus it is only

a step, under modern conditions of mental transportation, from the apple to the Absolute.

We, of course, habitually get off the train of thought much further down the line than Newton did. The apple falls, we say, because it is heavy, and we stop there. And in general we are quite willing to be put off by rough and ready answers, and to direct our lives by rule of thumb. The answers pass and the rules work because, if we take the trouble to investigate them, we find that they are based eventually on theories regarding the real nature of things which nothing has happened as yet seriously to contradict.

The debatable ground to which all questioning and all science finally leads is the sphere of metaphysics. When the different sciences have finished their tasks and handed their results in, we find that we are still unable to understand how those various aspects of the World of which they have treated are related to one another and to the Whole of which they are part, or to estimate the final significance and position in the character of the Universe of such things as space, and time, and matter, and motion, and life, and consciousness, and thinking, and valuing, and pursuing ends and ideals. It is the business of metaphysics to deal in surmises as to the answers to such questions, to frame a theory, as it were, which shall wholly cover our opposite neighbor in the tram-car and show how his many sides—his profession, his hobbies and amusements, his home-life and all—either hang together and make up a consistent character, or pull apart and leave him a multiple and disrupted personality, as the case may be.

There may arise at this point a misunderstanding against which we must guard ourselves. It might appear from what we have said that metaphysics, or, for that matter, philosophy, is a kind of afterthought invoked to supplement and bind together the results of the investigations made by the separate sciences. We get as far as we can, it might seem, in physics and chemistry and biology and psychology, and then being unable to proceed further, we make conjectures as to whether and where and how the various lines of investigation might plausibly meet. But such a view is really a reversal of the

procedure both of the individual mind and of the history of philosophy. The primitive wonder of the individual or the race face to face with the Universe expresses itself in questions and speculations of the most comprehensive sort. What is it made of? What is its meaning? What is its general attitude toward ourselves? Later, as we gather in more data and notice that they fall into more or less definite and separable groups, investigation becomes specialized. Finally, the different aspects and activities of the World become distinct, and speculation in various fields begins to result in theories where fidelity to the facts within their province is comparatively complete, exact, and tested by time and by the occurrence of the new data which time brings with it. Thus it is that the individual sciences begin to grow within the more general philosophic point of view and interest and eventually to detach themselves from it.

The sciences, then, are not the source but the offspring of philosophic speculation. Even the most full-grown and independent of them show unmistakably the mark of their origin. The motives which actuate them are the same motives as actuate the philosophical interest, their method is the method of philosophy, their subject-matter its subject-matter, their questions are metaphysical questions cut short, as it were. But whereas in them the all-impelling curiosity is chastened and restrained, in philosophy it still has the courage and the freshness to survey and challenge the nature of things in its entirety. The sciences, one might almost say, are philosophy disillusioned.

There remains the question whether philosophy is worth while. We often hear such queries as "What is the use of philosophy?" "Does it get us anywhere?" These interrogations are really covert reproaches. In defending philosophy against them much depends, of course, on what we consider worth while and useful. If by the question "Is philosophy useful?" we mean does it help us to make money, we might as well admit at once that it isn't and doesn't. But then neither does rowing nor tennis nor cruising nor stamp-collecting nor reading detective stories nor falling in love. Yet all these avocations are pleasant, and rest upon and give expression to some interest for the absence of which our life and Life as a whole

would be the poorer. The same is true of philosophy. If people like to philosophize—and philosophy as we have seen is the indulgence of a curiosity which nobody probably is wholly without—then philosophy is worth while and useful, inasmuch as it does its share towards contributing to the sum total of self-expression and of happiness. It makes life more entertaining for some people, to say the least. We might add, also, that a man's life is presumably the richer and the better rounded and balanced, in proportion to the number of interests it can muster and resources it can command. Each new interest is another root struck deep into the infinite fertility of the World, and another source of nourishment and stimulation to the more complete and brilliant flowering of the individual's personality and career. To add, then, philosophy to our other interests is to have enlarged our life by just so much.

Moreover, philosophy is an added interest in a double sense. Not only is it one more interest, but it also gives a new zest to our other interests. Just as it means looking at the World as a whole, so it also means looking at any one of our interests in the light of all the others. It is not a self-contained and separable activity. It is rather an outlook on Life which pervades and organizes and unifies all the partial and separate views which our numerous minor selves—our business self, and our sporting self, and our artistic self, and our self at home, and all the rest—take about things. It is a sort of mobile army in reserve, which may be brought up to reinforce any point of that extended line with all its irregularities and salients, its precarious and its sure positions, along which we are in contact with the Universe. Or, to descend from the language of the camp to that of the kitchen, we may liken it to the seasoning of a dish which does not destroy the other flavors, and cannot well be separated from them, but rather brings them all out with an added intensity, losing none and combining all in a single expression of pleasure upon the palate. Philosophy is, in very truth, the spice of life.

But the practical man or the Puritan will not be put off by any such justifications of philosophy as these. What he means by "useful" and "worth while" has nothing to do with any in-

crease of the pleasurableness of Life, or of its interest, its brilliancy, and its richness. What he wishes to know is whether philosophy contributes anything to efficiency and character. Confronted even with tests like these, philosophy need not quail. It can argue with considerable force that the habits of mind which it tends to inculcate are of practical assistance in the making of a living for one's self, and in contributing to the welfare of society as a whole. The habits of looking at all sides of a question, of taking all possible factors into account, of suspending judgment and not making hasty decisions, of recognizing the right to existence, and even the importance and value, of interests other than one's own; all these are useful habits to acquire, whatever one's occupation may be. Surely it can harm the efficiency of no man, if he raise his eyes now and then from his own profession and cast a sympathetic glance at that of others, perhaps even if he catch for an instant a glimpse of Life as a whole, and feel that his own career and his own achievements are merely one of the many ways in which Life fulfils itself. And these are habits which a study of philosophy should assist us in forming.

They may, of course, like any others, be carried to excess. A suspension of judgment and an impartiality which mean vacillation and indecision and consequent inability to act are harmful if not counter-balanced, and are said to be the peculiar vice of the philosophic temperament. It cannot be denied that there is some truth in this view. It would be a bad thing, probably, if there were too many philosophers in the world. Progress would be slow if it had to be gained by that steady and equal contact and pressure all along the front which philosophy advocates. Life gets ahead by concentrating its forces beyond all reason and at considerable peril, now at this point, now at that, by creating sharp and awkward salients, by planting its flag with an air of final triumph, in positions which the meditative mind sees at a glance to be untenable, and then by gradually straightening its line through retreat and compromise. But in the campaign as a whole, the philosophic temperament even in its extreme form has its value and justification. It tends to keep the line from growing too thin in the neglected

spots, and the salients from becoming so sharp as to be detached from the main advance and destroyed, and it prepares the reserve trenches in which the inevitable retreat from the positions taken with such splendid finality by the cranks and the reformers may find shelter.

If, however, a great deal of the philosophic point of view in a few persons is not harmful but advantageous to Life as a whole, we can say the same of a moderate amount of it in the great run of people, in whom its effects are more than offset by the exigencies of practical life. We are not apt to do too much star-gazing if our noses are held to the grindstone, and, after all, it is on a level somewhere between the star and the grindstone that we meet Life face to face. We can look too low and with too fixed and narrow a gaze, just as we can look vaguely to impracticable and empty heights. The one no less than the other makes us blind to the living world. Indeed, to be awake only to our particular business is deadlier than to dream. So, in an age where the stress is laid on making a living, rather than in living on what we have made, dreaming is a habit to be encouraged, not repressed. Even in one too much and beyond redemption a looker-on at Life by temperament, and a dreamer rather than an actor, philosophy is still not an unmitigated evil. It will stimulate, to be sure, the already over-emphasized contemplative habit, but it will in some measure carry with it an antidote to its poison. For it is well that the looker-on at Life should be not simply an audience to the mere passing show of events, however gorgeous and however moving it may be, but "the spectator of all time and existence." And this nobler outlook the habit of philosophizing brings. In the same way, the visions of the dreamer will be more effective, more readily translated, that is, into action by others, if they are checked and steadied by that perception of what things can and what things cannot be, which the philosopher-poet Lucretius regarded as one of the greatest gifts bestowed by philosophy upon mankind.

There remains the question of the relation of philosophy to "character." If a heightened sensibility to what we might call the iridescence of Life—Life with all its brilliancy and its subtlety, its tragedy and its comedy, its deeps and its shallows,

its ceaseless shift and play of events and values—is a contribution to "character," philosophy certainly should breed and train this keenness and delicacy of appreciation. Again such things as moderation and tolerance, a feeling that Life fulfils itself in many and other ways besides our way and that these other ways are equally necessary to its balance and its fulness, and a corresponding willingness to live and let live are qualities which are fostered by the philosophic view. Take the habit of looking at our own life as a whole, of seeing behind the self of the moment the larger and truer self in the long run, and of estimating the worth of any decision or deed, not at the face and often fictitious value of the present moment, but by its relation to the general scheme and career which we have planned. Here certainly we have a habit which means strength of character, if it means anything. But such a habit is simply the transference to our own life and self of that way of speculating about the nature of the World in general and in the long run, and of forming an opinion about its plan and career as a whole, which is the distinctive mark of the philosophic interest. It is hard to be interested in philosophy without philosophizing about ourselves, and it is hard to think about ourselves without forming some idea of what we really want and are really after. It is also hard to form such an idea without its becoming to some extent operative in our life. But the moment that it becomes thus operative, our actions are inspired, in part at least, by what we call principles. And principles are simply the plural of character.

Finally we might point out that if the word philosophy is mentioned in the drawing-room or on the street-corner, it is apt to suggest to the majority of people a meaning quite different from that which we have ascribed to it. In popular parlance it has come to mean not so much a way of meditating upon and speculating about the World as a way of meeting and dealing with what the World brings. We say that a man is philosophical about some misfortune which has befallen him or that he takes life in general philosophically. The term here has been taken over into the sphere of moral action, to specify the kind

of behavior which might naturally be expected in trying circumstances from one bred to the philosophic point of view. But it is noteworthy that the kind of behavior which we describe as philosophic we also regard as an indication of the presence of "character" in the narrowest sense of the word.

Let us sum up. Philosophy is the interest in puzzling out from the data presented by the face and behavior of things a plausible theory regarding their heart. A philosophic system is simply a guess, not at random but based on a comprehensive survey of the world, and ready with its reasons as to the real nature and constitution of the Universe. Philosophy differs from science, in that its interest is in the "whole man" so to speak, whereas that of a science is confined to making out simply some one side or feature of the whole.

A philosophic system differs from a scientific hypothesis simply in the amount of ground that it attempts to cover. The method of philosophy—the processes of inference and verification—differs in no essential way from scientific method. To put it all in terms of the detective agency, the sciences are like the individual detectives following up and reporting upon that particular aspect of the case to which each has been assigned, whereas philosophy is like the chief who gathers all their reports together, reflects upon them, tries to harmonize them where they conflict, and to supplement them by reasonable conjecture where they fail to connect or are unable to follow the clue further into the unknown. Thus it constructs, using their reports as its data, a theory regarding the true inwardness of the case which seems to it to throw some light, at least, upon the central Mystery.

The history of philosophy, then, is simply an account of the various guesses, made from time to time, as to the real nature of the World. The different solutions of the problem are not, however, propounded entirely independent of one another. Each new philosopher will be influenced by what acquaintance he has with the work of his contemporaries or predecessors. He will accept, modify, reject, react against the opinions of others in the light of his own estimation of the significance of

the evidence in the case. Hence we may reasonably expect that the history of philosophy will exhibit continuity, and perhaps progress. It is to a study of the development of philosophic theories among the Greeks and the Romans—a full thousand years of guessing—that we are now to turn.

## CHAPTER II

## GREEK RELIGION

### I

Aristotle surmised that philosophy first arose in Egypt because the priesthood there had leisure. With the geographical correctness of this statement we are not concerned, but Aristotle's reasons for making it are significant. In the first place he lays down one of the conditions necessary to philosophic speculation. The Egyptian priesthood, he tells us, had leisure. Philosophy requires time—time to wonder and meditate and make our guess about the inner constitution of the world. For that matter, if we are going to live at all, if we are going to have even the time to be busy about other things, we must philosophize a little. We must stop long enough to make up at least a rough and ready theory about the nature of things in general, and lay down rules of thumb about their behavior. Otherwise we are liable to be retired early and forcibly from business of any sort. But to push the matter beyond the rough and ready stage, to follow up the clues and work out a fairly intelligent and comprehensive theory tested by logic, and attested by experience: this is something of a task in itself, and requires a certain freedom from the distraction of other occupation. And such freedom can be enjoyed only under conditions of social stability and prosperity. We must have escaped from the bare struggle for existence, whether it be with our fellow men or with the forces of nature. There must be at least intervals of peace and of an assured income, when we can stop making or defending a living long enough to draw breath and look about. Philosophy, then, presupposes a state of society rich enough to afford leisure, and civilized enough to enjoy it. This point will interest us when in the next chapter we come to

survey the conditions in those Greek cities of Asia Minor where European philosophy had its beginnings.

But there is another implication in Aristotle's statement which claims our attention for the present. His mention of the priesthood in Egypt will at once bring to our minds a familiar association. Most of us are apt quite spontaneously to connect philosophy with religion in a peculiarly immediate and intimate way. What is the basis of this association in our minds? Why should a preoccupation with the problems of the one be likely to mean an interest in the questions of the other? In short, what is the relation of religion and philosophy that we should feel it advisable to preface our consideration of Greek philosophy with a discussion of Greek religion? A satisfactory reply cannot but involve us in some discussion of what religion is in general.

Let us turn back once more to our opposite neighbor in the tram-car. Nudge the man beside you and ask him what he thinks that person opposite looks like. Ask him further why he thinks so. The chances are that he will reply, "Oh I don't know, I just have a feeling that the man is a good sort, or a bad lot, or what not." It will be only when you have pressed him and pinned him down that he will begin to argue his reasons for feeling as he does. We are perhaps most familiar with these first impressions, which are prior to any use of rational inference and often quite unconquerable by any amount of reasoning, in the guise of what women call their intuitions about situations or people.

In precisely the same way we all of us have instinctive feelings about the world. These feelings are not the result of any conscious process of inference. They exist before the intelligence has begun to examine them at all, and often they continue to exist after intelligence has said all it can possibly say against them. They are irrational, not in the sense that they are necessarily unreasonable or wrong, for after all our first impression about a person may be correct, or a woman's intuition may accurately size up a situation, but in the sense that reasoning has little or nothing to do with their foundation. They are prejudices in the original meaning of the word—things which

exist prior to judgment. The general place and validity of these feelings or intuitions in our life is of great interest to philosopher and theologian alike. How far are they to be trusted? Are they short cuts to a far closer touch with the heart of things than can ever be gained by the roundabout and formal way of reasoning? Or are they blind alleys which lead nowhere? After all, superstitions and prejudices and obviously unreasonable instinctive feelings about things are also intuitions or impressions as deeply rooted in consciousness as those which are taken for revelations of the inmost nature of Reality. Perhaps, then, the longer way round of careful thinking is the shorter way home so far as home can be reached at all. Such are some of the questions raised by the existence of this sphere of feeling in our life.

It is within this realm of feelings and intuitions that the springs of religion are to be found. Religion flows from, indeed religion is, a feeling about the world which precedes any process of rational inferring or thinking out anything on the basis of carefully sifted evidence. When we come to define and justify our impressions, and to argue that what we feel about the real nature of the world is logically defensible and supported by the data at hand, we have added theology to religion. Since people differ in their interpretation of this first impression and in their definition of that which their intuition reveals to them, there are many ways of formulating religion, such as the systems with which we are all familiar, Christianity, Mohammedanism, Judaism, Buddhism, and the like.

But the feeling about the nature of the world which underlies all these various formulations seems to be the same. It is the feeling that at the heart of the world there is Something akin to our own heart with which we may communicate and from which we may receive strength and support. We might almost say, indeed, that religion is a sense of personal relationship to the inner nature of the Universe, an impression that the face of things masks another self like our own with which we may deal as we would with a fellow being. And we might add that as the moral experience of the race grows and the vision of perfection becomes more distinct, more intense, and more

ardently yearned for, this living Something at the heart of things is felt more and more to be in sympathy with the Good and our pursuit of it. It becomes a friend to whom we may turn for advice and sympathy and help in our struggle towards the ideal, sure that they will not be denied us.

We all of us know the difference that it makes if we go for a walk or a ride with a friend, even if it be only a dog or a horse. The two of us may go in single file, and I may not hear even the breathing or the footfalls of my companion, or both may go in silence each preoccupied with his own thoughts. The dog may range far afield in his own engrossing, adventurous world, with but scant time for me, or the horse may pick his way so softly and evenly down the wood-road that I may forget him altogether. But nevertheless such a walk or ride has a difference as real as it is subtle from walking, or running, or from driving a motor car, alone. We are familiar, too, with the contrast between the atmosphere of an untenanted and that of an occupied house. The one is cold and aloof with no response to our presence save echoes, the other is warm and personal and welcoming, though we may not see the occupants. Or again, for example, the Catholic finds the Protestant church empty and dreary and unhomelike, for the want of the real presence of the living Christ in the Host upon the altar.

Now to religious experience the Universe is not untenanted, but occupied. Life is not a solitary journey, but walking with a friend whose presence though not seen is felt, and the feeling of whose presence makes all the difference in the world. This definition of religion in terms of a "personal equation" will cover those forms of religious experience with which we are most familiar. But it must be remembered that there is a temperament and there are religions to which personality and what we call "self" mean limitation and imperfection to be escaped and transcended. From such a point of view the sympathetic Something existing behind the outward semblance of things will naturally be felt and thought of as impersonal in character. But it is still regarded as of like nature to our own deepest and truest character, of which our own personality is no more than a passing and illusory expression. Such is the teaching, for

example, of certain forms of Buddhism, where we find, instead of a personal God, an impersonal condition called Nirvana, and such we shall find to be the underlying thought of mysticism in general in connection with whatever religion or system of philosophy it may appear.

There are few people who have not had this feeling of a living and companionable presence astir, it may be in the outer world in the silence of a forest, or the level lights and quiets of a sunset, or snow mountains far away, or it may be far down within one's self in the storms and calms that move and brood over the depths of one's most inaccessible and incommunicable experience. Such impressions may be infrequent and fleeting, but they are the drops which go to make up that great ocean of religious experience which beats perpetually along the shores of philosophic and scientific thought.

It is easy now to understand the preoccupation of philosophy with religious questions. Philosophy when it approaches its task of framing a theory about the inner nature of the world, finds someone ahead of it in the field. It is met by religion and confronted with an established sentiment as to what Reality ought to be like. It cannot then go about its work with a perfectly free hand and unbiased mind. It knows from the start what the impression of religion is in the matter, and in forming its own conclusions it cannot ignore that impression. Try as it may, it cannot follow out its line of thought as it would if that feeling did not exist. It may find itself denying the validity of the intuitions of religion and maintaining that they are to be rejected along with other irrational and unreasonable prejudice and superstition. Or, on the other hand, it may try to confirm them by logic and evidence. Again, it may accept them in part, reject them in part, or modify them as reason and the data at hand would seem to dictate. But whether it explains or explains away, defends or attacks, its volubility is due to the unescapable presence of this religious feeling about the real nature of things. Even if a philosophic system ignores religion with a studied indifference, and in its effort after perfect detachment of point of view banishes from its vocabulary every term that is suggested, however remotely, by theology, its

unconsciousness of the religious interpretation of the world is about as genuine as one man's unawareness of another whom he is deliberately cutting on the street.

If philosophy cannot help noticing the presence of religion in life, we need not apologize for this chapter. Greek philosophy, like all philosophies, grows up in the midst of the religious beliefs of the day, and it is very much our business to inquire what the particular religious atmosphere of the Greek day was like. It should be understood, however, that we cannot concern ourselves with Greek mythology as such. Interesting as the subject is, it is beyond our province to investigate, for example, that half-descried primitive cult which seems to have existed long before the invasion or the development of the mythology which we find crystallized in Homer. We must content ourselves with remarking that it was a cult of the creative and destructive powers of nature as manifested in the death of the fertile earth in winter and its resurrection in the spring, and of the corresponding cycle of birth and death in man; and that it involved a ritual of propitiation of the dead, invocation of life, sacrifice of sacred animals, and communion with the divine through a partaking of their revivifying flesh and blood.

Nor can we rehearse again the long and splendid story of the Olympian Gods as told by Hesiod—how they sprang originally from a monstrous ancestry of chaos and black night, how they were brought to slow and painful birth through the death pangs of intermediate dynasties and generations, and how, born at length, they warred with and overthrew the Titans in a last tremendous battle which made them masters of the world. Again, we have no time to trace in the pages of Homer and the later poets the slow growth of the Gods out of brute force into goodness and beauty, or to show how their worship became less and less a worship of the untamed and unmoral elements and forces of nature, and more and more the vision and adoration of an ideal world purified from violence and inhumanity and made the friend and support of all that is best in man.

Finally, we cannot give the consideration they deserve to the doctrines and rituals of the Eleusinian and Orphic Mysteries,

focusing as they do religious aspirations and demands other than, and often in their direction counter to, those which inspire Olympianism. We have time only for a brief discussion of the underlying religious experience of the Greek, to which theology and ceremonial but give articulate and appropriate expression. To the consideration of this inward and invisible grace of which myth and rite are the "outward and visible sign" we must now turn.

## II

It will be remembered that in speaking of religion as essentially a feeling that at the heart of things there is Something akin and responsive to our own hearts to which we may turn for companionship and help, we pointed out that this sense of sympathy and support might seem to come to us either from the outside world of nature or from within our hearts through a still small voice speaking out of the hidden depths of inner experience. To some it might come most vividly when they went out and raised up their eyes to the hills, or to the "mighty marching and the golden burning" of the starry night, to others when they had closed their eyes and shut out the world and had retired to some far-away, secret recess of the soul.

Now, the religious experience with which we are most familiar, and under whose influence our modern philosophy has developed, is of the latter inward-turning, subjective type. From the beginning Christianity has bade man seek God within himself, and has taught that the external, physical world and the ranges of experience with which it furnishes us are if anything obstacles to that search. The process of salvation is essentially an inner process. It is a rescue of the inner life from dependence upon the outward world and a restoration of it to an immediate communion with God in which the physical and the external are forgotten. The objective side of Christianity, the historic Incarnation and Redemption, is but the lever for applying pressure from without to loosen the soul from the hold of the body and the bonds of Nature, and to impel her to a "supernatural," "spiritual" career and destiny.

The interest and solicitude of Christianity, then, center about the soul, the character, the personality, the private relation of the individual will to the will of God. The world for which the blood of redemption was spilled is the moral world, the great company of immortal spirits estranged for a while from each other and from God by the barrier of the body and the limitations of the material universe. No drop of that blood overflows into the outer and physical world. In the benefits of salvation no being, animate or inanimate, save the human, shares. The physical world remains unchanged. But after all, from the Christian point of view, why should Nature be affected by the process of redemption? Except for man, we are told, her animate forms are unmoral and without souls, and for the rest she is mere inert, dead matter, a creation, not a creature. Her relation to humanity is at the worst that of a prison for the brief incarceration of the soul; at the best a temporary stage for a transitory actor, from both of which there is speedy exit to a supernatural life and destiny.[1]

Greek religious experience, however, presents in all these points a great contrast to Christianity. In the first place, it was not an introspective experience. The ancient Greek was not given to self-analysis and self-questioning. He did not isolate his self, as something different and apart from the rest of things. He did not regard his consciousness as having a different kind of being from other things, or even mark it off very clearly from the things by which it was surrounded. He was scarcely conscious of having a soul, or of being a person in the exclusive and self-conscious sense in which we use the terms. The problem of the "inner life," the reverent discussion of "moral personality," the painstaking effort to distinguish the real behind the apparent duty, would not have interested him. For that matter he had no words in his language to reproduce the tone, and in many cases even to translate the terms, we use when we speak of "person," "personality," "individual," "individuality," "the self," "selfhood," "self-consciousness," the

[1] It is interesting to contrast this preoccupation of Christianity with the human soul, with the saying of the Buddhists, "There is not a particle of dust that shall not enter into Buddhahood."

"ego," the "I," "conscience," etc. Still less would he have understood us when we hyphenate them with the words "moral" and "ethical" and "higher" and "inner" and "inmost," and generally exhaust the vocabulary inspired by that painstaking self-examination which plays so large a part in the religious experience of to-day, and is the source and essence of so much of our modern philosophy.

This lack of self-importance and self-consciousness in the temper of the Greek mind has its complement in the attitude of the Greek towards the external, physical world. As he did not feel that a person was essentially different from other things, so he did not feel that other things were essentially different from persons. The world, including himself, was all of one piece, and the life moving and feeling within his own body was but a sample of the life that moved and felt in all other bodies, in sky and sun and sea, mountain and river, field and wood. The distinction between the animate and inanimate he had not as yet drawn. He looked upon Nature as essentially akin to himself, not dead, but alive to the very twig-tips of the shimmering, quivering olive-groves that set his own cities about. She was not a creation but a fellow-creature, not a machine but something to treat as one would treat one's fellow-men and responsive to such treatment. He found a warmth, a pulse, a breathing, and a trembling in the things which for us are still and cold and inanimate. In a word, whereas the events and objects of the physical world are for us at the best mere staging or furniture to the play of human life, for the Greek they were co-actors, with their appropriate costumes, lines, and parts in a larger drama which included men and things alike.

Perhaps we come as near as we may to understanding the Greek feeling for Nature, if we say that the attitude towards the outer world which is sometimes the privilege of the imaginative, country-bred child was kept by the Greek always, not stifled but intensified by the maturing of his experience. To the child, also, things move and whisper, alert with something alive and akin to himself, forever hiding and peering from behind them. He does not personify deliberately, but things for him as for the Greek are still people and have not yet been

divested of their personality. Most of us have had the experience of catching for an instant in the lines of a gnarled tree-trunk or rocky cliff the vague yet startling semblance of a human face. But, to make of the experience a sort of parable, we might say that whereas for us such haunting semblances are soon dissolved and lost in the other lines and forms discovered by further observation of nature, for the Greek they persisted, and continued to dominate the other patterns which a closer examination of Nature revealed. Things did not die as they do with us into cold fact and disembodied fancy. Shades of the prison house did not close upon him; and in the sunlight he never saw simply "the light of common day."

Religious experience, then, came to the Greek from without. The sense of companionship and sympathy at the heart of things led him not to an inner, secret communion with an unseen friend but to friendship with the outer world. He communicated with his Gods not by a telepathy or thought-transference, which takes place beneath the surface without any perceptible medium of exchange, but by the ordinary means of communication between human beings. He heard the voices of things. He looked upon the face of Nature, and beheld its beauty, its joy, its sorrow, its wrath, and its desire. He saw the "tears of things," and their "innumerable laughter." And he knew how the Gods felt, and felt with them, even as one man will catch the meaning of another from the expression of his features, his gestures, and his spoken words.

It is true, as we shall find when we come to discuss the doctrine of the Eleusinian and the Orphic Mysteries, that there is also in Greek religion a powerful undercurrent setting in the other direction and seeking God through the channels of the inner life. This tendency gathers strength later, colors and directs to a considerable extent the philosophy of the Roman Period, and contributes not a little even to the subjective aspect of Christian thought. Very early, too, in the history of ancient philosophy we shall come upon a presentation of the "mechanical" view of Nature so nearly complete and definite that modern science has done little save to fill in the outlines in greater detail. But neither the "mechanical" view of the Atomists nor

the "subjective" and "mystical" tendencies of the Mysteries could turn the Greek mind back from the outer world and in upon itself for its religious experience. This was true even in the later days of the final triumph of the subjective and mystical cults, when a world-weary and introspective age sought refuge from the religious and moral chaos of the old order in the sure and inner communion with the divine which they promised. Not even then could they dispossess the Hellenic mind of the feeling that though Nature might be far removed from God she was still sprung and descended from him, and that the radiance of her face was still the light, diminished and darkened perhaps, of his countenance.

Upon the essential humanity of the Greek Gods we cannot too strongly insist. Hauntings there were, of course, in myth and rite of the ancestral terrors of primitive man helpless before forces which he could not control or comprehend. But the age of terror and the disordered and monstrous deities which it bred had long since passed. The sense of kinship with Nature meant to the Greek a world not only as living but as human and as sane as himself. As his vision of civilization became clearer and steadier, and his grasp of it more sure, he neither detached his Gods from Nature and opposed them to her, nor contrasted his conduct and the ideals and rules which inspired and governed it with the behavior of physical phenomena. He simply infused Nature with his own growing civilization, and found more and more clearly revealed in her processes examples of the order and balance and harmony and fitness which he had learned to worship, and sought to realize in human life.

As a result the Hellenic mind drew late and indistinctly the line which we make so sharp between natural or physical, and moral, law. Natural law, we say, is simply a description of how Nature actually does behave; moral law prescribes how people ought and perhaps are obliged to behave. But Science insists that the processes of the physical world must not be regarded as governed by moral obligations or motives. The movement of bodies in space is not actuated by ethical considerations. The formula of gravitation is not a police regulation. Chemical elements do not combine because combination is to the advan-

tage of the world as a whole, or dissolve out of obedience to the decree of some higher court which has the interests of the Universe at heart. To explain the behavior of the natural world on moral grounds is, we feel, to turn Science, and for that matter Ethics, topsy-turvy. But we only feel so because we have isolated ourselves and our ideals from our universe, and have contrasted ourselves as moral beings with moral aims to the unsympathetic mechanism of the physical order which surrounds us.

To one who felt, however, as the Greek did, that the material world about him was not a machine but essentially a society of beings similar to himself of which he was an integral member, the law of gravitation, for example, might well seem a moral law, which holds physical phenomena to their appointed places and appropriate tasks with all due consideration for one another, in the same way that it exacts from men an observance of their duties, and a respect for one another's rights. And conversely he might regard the laws of human society as representative articles of the constitution of the world and that constitution as a Bill of Rights and duties for all beings alike. In a Universe so conceived the notion of mechanical and physical necessity would not as yet be sharply distinguished from the idea of propriety and right, when it came to explaining why things are what they are and behave as they do. The distinction was drawn fairly soon; but we shall find persistent in ancient philosophy interesting expressions of this tendency to consider moral and physical law, as well as animate and inanimate things, essentially the same.

We can sum up and restate this attitude of the Greeks towards their Gods by saying that the analogy dominant in their conception of the Universe was that of a society. To Greek religion the Universe looked and behaved as if it were an enlarged edition of the city-state. Men and things were alike citizens of it, and equal before its laws. The Gods were the aristocracy, men the commoners, of this commonwealth. The constitution of Nature was through and through a political constitution.

That the Universe was the fatherland and home of Gods and

men alike, implied for the Greek not only a physical but a moral tie between the divine and human natures such as Christian theology has no conception of. The Gods shared our space and time and bodily conditions and were in and of our world. They had, in a word, the same physical environment as we. And the base, like the range of their experience, was similar to ours. They shared our passions, and feelings, and interests. Their ways were our ways, and their thoughts our thoughts. So, to use rather a daring figure, man and dog live together in the sympathetic tie of a habitation and an animal nature and experience shared in common. But, as the poet Maeterlinck has somewhere said, the dog is the only creature which has really found its God. And even as the nature of man is the nature of the dog raised, as it were, to a higher power, so for the Greek the divine was human nature with all its body, passions, and intellectual and moral parts intact but perfected and glorified.

This community of the divine and human natures in so many respects put man on a friendly and familiar footing with his universe and his Gods. In the words of Mr. Dickinson, it "made him at home in the world." [2] The Greek would not have understood, and would have rejected as barbarous, the feeling that no man could look upon the face of God and live. Even the Christian analogy of a Father and his children would not have best expressed their feeling of the familiarity of God and man. For the Greek at the most thought only of Zeus as a Father, and even he was so human in point of view as to seem like an elder brother. And as for the others, they were older brothers pure and simple, more grown up, more experienced, greater, stronger, wiser, better than we, but still of the same race and parentage and to be treated with fraternal camaraderie.

In a word, the Greek felt himself the social equal of his God. God and man met in the same house and ate at the same table. The distinction between them was a distinction of title and ability and office alone. In the same way to-day royalty and gentry are both members of the same class and as such mingle with one another. So it was that the Greeks prayed, neither

[2] *The Greek View of Life*, p. 4.

prostrate in the dust like the Oriental, nor kneeling with bowed head like the Christians, but with uplifted face and outstretched hands. In the divine presence they behaved as Kipling tells us the souls of the heroes behave:

> "And they rise to their feet as He passes by, gentlemen unafraid."

At the same time, this social equality and familiarity of man with God was tempered in the attitude of the orthodox worshiper by a recognition and punctilious observance of the difference in rank between himself and his divinity. Familiarity with him bred not contempt but respect. "One is the race of men and Gods and from one mother we both derive the breath of life; but in power we are altogether diverse; for the race of man is nought whereas the brazen heaven abides a dwelling place unshaken forever." [3] And again, "Seek not to become Zeus. . . . Mortal things befit a mortal." So the poet Pindar sings, and his words are a fair index to the mind of the orthodox Greek. A trespass upon the prerogative of the Godhead brought upon it a rebuke as swift and sharp as any administered by a king to an impertinent courtier. Man must keep his place, or he would be summarily put in it. The fact that underneath the difference in rank Gods and men were fellow-beings and alike gentlemen, gave man no license. Where there is the chance and temptation to presume, etiquette has to be the nicer and the more rigid.

In its worst form, this feeling of the Greek that every nature in the Universe has its proper excellence upon which it is folly to attempt to improve, and bounds which it must not overstep, crystallized in the famous doctrine of the envy of the Gods. It was a popular belief that the Gods were jealous of overmuch even strictly human happiness and prosperity, because man was raised thereby towards a dangerous equality with the divine. This view was by no means confined to Hellenic thought. In the Old Testament Jehovah proclaims himself a jealous God, and Adam, we may remember, was expelled from the garden of

[3] Pindar, Nem. 6, 1-7 (trans. Adam).

Eden not so much for disobeying the divine command as from the divine fear lest man having "become as one of us, to know good and evil," should now "put forth his hand and take also of the tree of life and eat and live for ever." [4] The sentiment persists to-day in the habit of accompanying any boasting thought or speech with an apologetic and propitiatory tap upon the nearest wooden object. In its finer manifestations, however, the feeling was bound up with the Hellenic sensitiveness to moderation and balance and reasonableness as the essence of all the virtues, and with the conviction that blindness to the limitations of one's nature and station with its consequent immoderateness and presumption and insolence is the root of all moral evil.

III

For us to revitalize this social and political analogy is as impossible as it is to recover the Greek sense of kinship with nature. But it is obvious that in its light many notions common both to philosophy and theology, such as the omnipotence and omniscience, infinity and perfection, of the divine nature must have had a meaning for the Greek very different from their significance for us. We speak of God as both infinite and perfect with no sense of contradiction. Indeed, we feel that perfection is enhanced by infinity. The Hellenic mind, however, found the two terms absolutely incompatible. It was the clear-cut, the comprehended, the definite, the familiar, which was the perfect. The limitless was that which had no definite nature to know a definite law. But only that which had a determinate and attested character and was under obligation to fill a specific place and fulfil a specific function could be part of a thoroughly civilized and ordered world. The Gods then could not be infinite. They were rooted in a definite moral ideal. Their outlines, at last descried and held in clear and steady vision, were not to be blurred and erased again by the concept of infinity.

The Greek habitually spoke of the Gods as all-powerful and

[4] Gen. iii. 22.

all-knowing, but here again it is plain they did not mean by the terms what we mean by omnipotence and omniscience. They used the words in a qualitative rather than a quantitative sense. We, for example, are not surprised at the notion that the universe was created out of nothing by the mere fiat of a divine will. "And God said, Let there be light, and there was light." But the idea of thus conjuring a world into existence from sheer nothingness by a simple word of command was wholly foreign to the Hellenic intelligence. Indeed, the Greek version of the matter was the exact reverse of the Christine doctrine. God did not create the Universe, but the Universe produced the Gods. Or rather the Gods and the ordered world arose alike by successive stages out of the same primæval chaos. And when the Gods did finally take a hand in the direction of affairs and became active factors in the further evolution of the cosmic order, it was as powers in contact or even in conflict with other already existent forces. They did not create, they merely remodeled and reconstructed. They were subject to the limitations imposed by the inherent properties of a given material and by the features of a plan already for the most part drawn out. Their nature and position were more exalted than ours, to be sure. Their rôles were more splendid, and they played them perfectly, but like ourselves they were still actors, not authors, of the world-drama.

This feeling that Gods like men are subject to the constitution of a world-state which allots them their places, lays down their privileges and powers, and holds them to their offices, was expressed by the Greek in the concept of Moira or Destiny. The idea perhaps was bound up originally with some primitive habit of thinking of the world as a sort of field on which the "claims" of all things were staked out and the bounds of each plot or lot sharply drawn.[5] But it also soon carried with it the suggestion of a dim Power or Necessity behind the Gods which laid a restraining hand upon their natures and activities, and compelled them to keep within the bounds of their allotments.

A sense of such an all-compelling Fate whose decrees even the Gods cannot bend was strong in Homer. Later, as the idea

[5] *Cf.* Cornford, *From Religion to Philosophy*, p. 10 *seq;* p. 40 *seq.*

of the Gods developed, Destiny and Necessity tended to become identified with the supreme will and authority of Zeus. But even in Æschylus where the exaltation of Zeus above the other Gods is carried to an almost monotheistic conclusion, we find the query whether the Most High himself may not be weaker than the Fates and those implacable avenging ministers of Justice, the Erinyes; and the answer is that even he cannot escape what has been apportioned him.[6] In connection with this theological point of view it is interesting to note that the idea of an absolute creator was entirely absent from Greek philosophy, and that until very late matter was regarded as uncreated and coeternal with whatever other first principles were invoked to explain the world. Moreover, in later Græco-Roman philosophy the question was of the possibility not of a creation of matter out of nothing, but only of deriving it from or identifying it with the divine substance itself.

When the Greek then spoke of his Gods as all-powerful, as he frequently did, he did not mean that the Gods did or could create or annihilate or radically alter a world at their pleasure. He meant merely that they had all the powers suitable to their office. They could effect everything it was incumbent upon them to perform. The dignity and authority of the rulers of a city were not curtailed but enhanced in his eyes by the fact that they were constitutional rulers, nor were their powers less full because defined by law. And the Gods were constitutional magistrates, not absolute or despotic rulers such as ruled the barbarians. They had their office determined by the nature of things, and powers commensurate with that office. They were the administrators of the moral and physical equilibrium of the Universe. They could keep things to their courses and places, and men to their places and duties. They could control natural forces and subordinate them to the enforcement of Right and Justice throughout the world. More power than that would have added nothing to the divine majesty and would have imperiled the "constitutional" character of the Universe. For power prostituted by disorderly means to wayward ends only makes the concept of omnipotence meretricious.

[6] Æschylus, *Prometheus Bound,* 11, 531 *et seq.*

The same is true of the Hellenic view of the divine omniscience. When the Greeks said that a God knew all things, they meant simply that he knew all that it was necessary or appropriate for him to know at the moment or in the long run. They did not mean that his mind was congested with an observance and knowledge of all that happens everywhere and at all times. The amount of his information was governed by fitness and relevancy to circumstances.

This qualitative as compared with our quantitative view of omniscience, is expressed very clearly in the system of Aristotle, which marks the highest point reached by Greek, or perhaps any, philosophy in its speculations about the nature and activity of the divine mind. God is represented as without experience of the world of sense, or even knowledge of the existence of such a world. His thought is purely abstract—of forms and laws—and these, again, the forms and laws of abstract thinking without any content of perceptions or images. Thus his intelligence, freed from the distraction of any external objects of knowledge, is at liberty to contemplate only itself. But this is no restriction upon a divine intelligence, for nothing but its own supreme and perfect nature is worthy of the attention and thought of a divine mind. There could be no greater contrast to this view than the modern idea of the all-seeing eye and the all-inclusive mind of God.

## IV

We have seen that because of fundamental differences in attitude and feeling towards the world, the Greek view of the divine nature and its relation to the Universe was quite removed from our own. What we are wont to regard as absolute and unlimited, the Greek drew quite frankly to a human relative scale, taking the measure of the completeness of the divine by merely remedying the shortcomings in human nature. We turn now to certain oppositions between Greek and modern thought touching questions of ethics, which we may refer to the same underlying tendency to think of the order of the Uni-

verse as a sort of enlarged city-state of which men and natural forces and phenomena were all alike citizens.

In human society the individual man is limited by certain conditions. He has his place, his part, his lot, to which he must keep. He may enlarge his individual sphere, and may grow, to be sure, but his growth must not unduly interfere with the self-development of his fellows and neighbors. Friction and interference there is bound to be, but it is the business and the very condition of the existence of the state to reduce the amount of trespass upon property and personality to a minimum. But mankind was for the Greeks also part of a larger cosmic society which defined and limited the sphere and activity of human nature with the same respect for justice and equity as dictates the action of the state in setting bounds to the activity of the individual. Upon these two considerations the Greek view of virtue rested. The essence of virtue lay in the observance by the individual of the restrictions placed upon his particular nature by the human society of which he was a member, and upon human nature as a whole by the cosmic social order to which it in its turn belonged. Virtue was respect for the established order of things human and divine, expressing itself in appropriately restrained and directed actions. It was not doing the things which "are not done" in dealing with a fellow-being or a God.

But it is difficult to know just what the bounds are, and to see clearly when we are within our rights and upon our own property, and when we are trespassing upon the rights or lots of others. We are only too apt to be blind to the line that separates the one from the other. But if we are thus heedless, we overstep the line, go beyond the appointed limit, and presume beyond our station. We are insolent to the established order. This heedlessness, if persisted in, becomes a habit, a chronic blindness to the proprieties of things and disrespect of the social and cosmic law of Justice. Thus little by little sin sets and hardens in the character.

The Greeks, of course, like all other peoples and times, had their own code, dictated by the particular circumstances of their existence, of what especially constituted transgression

of the moral law. And this code, naturally enough, differed from our own. But the interesting comparison for us is the difference in the fundamental concept of sin.

We must note, in the first place, the objective and, one might say, impersonal character of the Greek idea. We are taught to think of sin as something whose real significance and results are internal, involving an inner estrangement of the soul from God which is far worse than the objective character and the possible objective consequences of the sinful act. The will is perverted, the soul corrupted and diseased. From this state of sin there is no natural recovery. The healing power of the divine grace must be called in before the soul can be restored to spiritual health and a reconciliation of the human with the divine will be effected. But on the other hand if the reconciliation is effected, and the reassurance is at hand, the whole objective side of the evil deed, its consequences for others, and the penalty which society may exact for its commission, no longer matter. The soul has made its peace with God. All that is of importance, then, in sin and conversion and absolution is subjective and unseen.

But the Greek temperament, in its dominant mood at least, suffered little from what modern theology calls the "conviction of sin." It was not burdened with a sense of unworthiness, or with a feeling of being stained through and through, beyond hope of cleansing itself, with the taint of moral evil. The objective and external character of the act and its consequences exhausted the sinfulness of the deed, and left no residue to corrode the soul. When the retributive action of human society and the compensatory workings of the divine justice had exacted the due penalty from the sinner, he might be regarded as discharged and his account as cleared. Indeed, the payment of a fine, in the shape of gifts and sacrifices and propitiatory acts, could often be substituted for punishment, and the divine vengeance thus averted. But although the sinner were left bruised and sore, as well as out of pocket, his soul was not internally and organically injured. If only he had learned wisdom through his suffering and come to a realization of his place and limitations, he was as good as new. Of course

if he did not profit by his lesson, but persisted in his short-sightedness, blindness to the true proportion and perspective of things would grow on him as a habit. But, even so, the sinful propensity was not thought of as a disease of the inner nature and nerve of moral vision, but rather as a kind of film of progressively denser stupidity drawn like a cataract over the surface of the eye. Remove the cataract, enable the individual to see clearly his true relation to others, and his naturally intact and healthy vision would reassert itself unimpaired, and keep him upright and from losing his sense of balance.

In short, whereas for Christianity the origin and seat of moral evil lies in the will, for the Greek it lay in the intellect. We talk of the will disobeying the better judgment, ignoring a clearly seen and recognized distinction between right and wrong, and deliberately flouting the plainly heard voice of conscience and of God. But the Greek would have said that we did wrong primarily because we did not know the right. The judgment became confused, the sense of proportion was blinded, and as a result we lost our balance and fell into evil ways. The very word for sin meant originally "a missing of the mark." It is to this old conception of sin as mental aberration, which goes back to Homer, that we must look in part at any rate for the intellectual bias of all Greek ethics, and for Socrates' famous dictum that "virtue is knowledge" and that if a man only knows the right, he will always do it.

Finally, the difference between right and wrong doing was for the Greek a mere difference of quantity. The impulse to virtue and the temptation to vice did not come into the human heart from different directions and sources. Both had the same origin in the instincts and the energy with which human beings are endowed. These instincts and interests were the mainsprings of human progress and happiness. Yet in so far as they also urged men to aspire beyond the bounds of their individual provinces, and to encroach upon those of their neighbors, or incited mankind as a whole to dream of becoming as a God, they were at the bottom of unhappiness and sin. That is, sin was simply overdoing, or it might be underdoing, some-

thing that was in itself a good. This feeling manifested itself strongly, as we shall see later, in the Aristotelian teaching that vice is the deficiency or excess of the same qualities which in moderate and adequate amount constitute virtue.

For the Christian, however, the difference between good and evil is more than quantitative. The arrogance of the sinner is not simply too much of the same assurance which makes a man efficient and successful and happy. The force which makes one miss, is essentially different from that which makes one hit, the mark. The motives of right and wrong doing spring from different sources and flow in morally opposite directions. Indeed, so radically opposed is the character of the vicious to that of the virtuous will that it almost seems as if they could not belong to the same nature. They are intertwined, to be sure, in every man, but they are rooted in separate soils. The human being thus tends to split asunder into two conflicting natures, a higher and a lower, the "Lord from Heaven," to use St. Paul's phrase, and the "old Adam," the one sustained and directed by the grace of God, the other excited by the prompting of a devil.

A movement towards this point of view we shall have presently to remark also in Greek religion. But it never attained the virulence of Christian dualism. Nor could it vitally affect the more fundamental tendency of Greek ethics to regard virtue and vice as different degrees of the same activity, the right and wrong amounts of which were determined by outer considerations and by a sense of the proportion and harmony and balance necessary to the completest life of the individual, the most harmonious constitution of society, and the most order in the universe at large.

## V

Another point of contrast between orthodox Greek religion and the religious doctrines to which we are accustomed is the comparatively slight part which the doctrine of immortality plays in the worship of the Olympians. There has been frequent notice by students of Greek literature and religion of

the lack of interest in the question of the survival of the soul after death shown by Homer, by the poets of the Seventh and Sixth Centuries, B. C., and by the great tragedians, whom we may regard as representative of the educated and reflective thought of their times. In Homer, to be sure, the dead left behind them souls which went wailing down into the dark house of Hades beneath the earth. But these souls were shadowy and witless images without substance or intelligence, drained of the red blood of real existence, and deprived of all that makes life worth living. And their habitation was a gray and sunless land where nothing bloomed save the ashen flowers of the asphodel. When Odysseus in his descent into Hades met the ghost of Achilles, the latter told him that he had rather be the servant of some man of mean estate above ground than rule over all the worn-out dead below, and the speech voiced the attitude of Homeric times towards an after-life. Nor was there any idea, save in the cases of a few notorious sinners against the Divine Majesty itself, of future reward and punishments. As for the rest, the good and the wicked fared alike in the spectral twilight of Hades.

Again, the poets of the Seventh and Sixth Centuries, impressed as they were with the misery and injustice of life, and with the problem of justifying the Gods' apparent failure to apportion reward according to merit, never invoked Immortality and the idea of compensation and retribution in another world as a possible explanation and palliative of the state of affairs on earth. The tragedians, too, although they must have been subject to the counter-influences of the Orphic and Eleusinian Mysteries which we are about to discuss, made astonishingly slight reference, so far as we can tell, to an existence after death. It may very well be that the proprieties of their dramatic art demanded that they should exhibit justice done and the moral equilibrium of the Universe restored here and now, on this earth, before the eyes of the audience. A play could not well be ended with the statement that the hero or the villain would receive what he deserved after death. But at the same time their silence may be taken as a suggestion

that orthodox Greek thought as a whole up to the time of Socrates paid little attention to the idea of immortality.

## VI

We have already given warning that there were in Hellenic religious experience tendencies in some respects different from the points of view which we have been describing. They merge indeed into the general background of Greek religion, with its unwillingness to distinguish between persons and things, and its sense of the solidarity of Gods and men as alike the children and the dependents of the same World-Process and World-Order. But upon this common stock of sentiment and attitude they grafted religious needs and yearnings which the established cult of the Olympian Gods failed to satisfy, and out of it they developed an answer which seems often more in keeping with the Christian than the traditional Hellenic point of view. It is to these counter-currents that we have to devote the rest of this chapter. We can best effect the transition by drawing attention to a paradox inherent in religious experience in general.

We have defined religion roughly as a feeling that behind the face of things there is at their heart Something akin to our own inner life, which can be treated and treats us like a fellow-being. And we have pointed out that as the moral evolution of man progresses, this Something is conceived as sympathetic, helpful to the right rather than the wrong, and possessing and exemplifying the qualities and condition of life which we regard as ideal and after which we struggle. God is God because he is good, and on the side of the Good.

If now we reflect upon what we mean when we say that God is good, we shall find that we really have two quite different and opposed ideas in mind. On the one hand we mean by the goodness, the perfection of God. God is divine, is God, because he is lifted clear of all imperfection above the sin and sorrow and suffering which render human life incomplete and distressed and restless. He is the Ideal, the unbroken Peace, the fulfilled and sorrowless and deathless Life that knows no

evil, the Happiness upon which no shadow lies. And it is because he holds before us this Vision of a Life detached and liberated from all the weaknesses, the temptations, the struggles, the failures, the bereavements of human life, that he is worshiped and glorified.

But although by thus focusing all the dreams and desires of the world in a vision of existence made perfect and happy, the idea of God fulfils the noblest of its functions in human life, religious experience makes another no less insistent demand upon it. God must be more than a still and splendid Vision of Perfection. He must love mankind as well as be loved by it, must stoop to the world, must know, and in order to know fully, must undergo the temptations and struggles and sufferings of our life. And he must ardently yearn and strive and even sacrifice himself for the redemption of his creatures. But in that case his life must be as full of dissatisfaction and restlessness and pain, and of longing for the coming of his kingdom, as ours. To say this, however, is to contradict our first demand and mar our Ideal, which is ideal precisely because of its freedom from the imperfect aspects of our life. We are asking in the same breath that the Divine Life shall be both as unacquainted with pain and sorrow and death as we should like our life to be, and as acquainted with grief as our life actually is. We are permitting in Heaven precisely the conditions which we are striving to banish so far as we can from earth.

This paradox has troubled theology and philosophy not a little. In ancient philosophy, for example, it took the form of a controversy between the Stoics and the Epicureans, as to whether God was worthy of worship because he was a beneficent and active Providence, or because he simply enshrined, free from all contact with the world, the vision of Perfection. Aristotle prior to the Epicureans had already declared for the latter view, and carried it to its logical conclusion. God, he had said, did not bestir himself in the matter of the progress or the salvation of the world. He was simply the motionless Goal towards which all things aspired, the one Example of achieved perfection, whose completely fulfilled and happy ex-

istence incited all other natures to strive, each after the realization of its own capacities and excellence. So absorbed, indeed, was the Aristotelian God in his own perfection that he did not even know of the existence of the world which his example aroused out of formless lethargy to energy and order. It is interesting to contrast this view and Aristotle's famous statement that God incites motion in the world simply "as something beloved," unmoved himself, with the saying of the author of the Fourth Gospel that "God so loved the world, that he gave his only-begotten Son" for its redemption. Indeed, the two statements might almost be taken as the mottoes of the two opposed demands upon the goodness of the divine nature.

Now it is fair, I think, to say that the cult of the Olympian Gods drew its chief sustenance from the demand that the divine nature should present a vision of attained perfection. The Gods, to be sure, intervened in human affairs, bestowing benefits, rewarding the righteous, punishing the unjust, and were to be petitioned and placated as the case might be. But their worship came less and less to depend upon what they did, and more and more upon what they were. Their righteous government of the world was if anything but a reflex expression of their ideal characters. Had they been retired from active service to the world, as the Aristotelian and the Epicurean Gods actually were, their characters alone, formed and built up out of the Hellenic yearning for beauty and serenity and order, were sufficient to insure divinity and adoration. As a matter of fact, the nature of their activity in the world, their administration of the cosmic balance and justice and their direction of human affairs, never involved them in the coöperative and redemptive relation craved by one side of our religious experience. They were the patrons and protectors of particular states or cities or individuals whose prosperity and happiness they had at heart. But in spite of their glorified humanity, they never broke down the barriers of superior rank which separated them from human nature, or abandoned their prerogative of luxurious and immortal life, and became like one of us, knowing our infirmities and our fate. They knew about our misery from without, they did not experience

it from within. Their deathless felicity was unclouded by the mortality and unhappiness of our lot. As Hermes says of Zeus in the "Prometheus Bound" of Æschylus, they did not know the meaning of the word "alas." They dwelt afar off in the calm, unclouded peaks of that Olympus up whose steep cliffs shrouded by mists, swept by storms, and chilled by snows, all men toil, but they could not guide and help or even tell us the path to their serene, unshaken seats.

But Greek religious experience, being but part of universal religious experience, craved also Gods who gave help and guidance, and groped after the God who knew the meaning of the word "alas." The more fortunate and the more spiritual might, indeed, sustain themselves on the level of the Olympian worship and adore, for the sake of their sheer beauty and happiness, its splendid visions of that complete and perfected existence after which all men yearn. But to the less fortunate, and the less assured, to the simple and the ignorant, to the great mass of mankind on whom the injustice and imperfection of life bore more heavily and evoked a more naïve response, the presence of evil in the world was a more important and compelling fact than the vision of the Good. To them the prime function of religion was not to portray however nobly the Ideal, but to afford man relief and escape from his present sorrows and infirmities. Man might reverence from afar the sorrowless life of the august Olympians, but his immediate need was for salvation from his own imperfection. So it is that we find side by side with the Olympian cult, with its stress upon the perfection of the divine life, another religious movement, with its stress upon the imperfections of human life and responsive to the cry for redemption from evil.

This "religion of redemption" then, we shall naturally expect to find concerned with an attempt to devise a cure for evil and incidentally to explain its existence. Now the cure cannot be found simply in a reformation by man's unaided efforts of the conditions of his earthly existence. It is only the strong and fortunate, even among the virtuous, who can wring happiness from life by might and main. For the others "supernatural" and divine assistance is necessary. But again, the

cure is obviously not effected in this present life. The rain falls on the good and evil alike. The wicked prosper and the righteous are ground to the dust beneath their heel. The trust of the righteous must be then in a life after death where they may have reward for their merits, and rest from their labors.

Even so, however, the misery of this world is not explained. Evil here and now is not justified by the promise that in the future it will cease. But if we apply the idea of immortality to the past as well as the future, the existence of evil becomes more explicable. Not only will man live on after death and reap hereafter what he is sowing now, but he has lived before birth and is reaping now, by the workings of a law of moral cause and effect which the Buddhists call "Karma," the fruits of his sowing in past existence. His present misfortunes are then, but the wages of sin committed in former lives. Misery is an expiation of guilt. Thus the sense of immediate and burning injustice is removed, and man is shown to the satisfaction of his moral sense why he suffers as he does, and how eventually he may escape.

We shall not be surprised, then, to find that the tendencies in Greek religion which we are about to study gave a central place to the ideas of immortality and reincarnation. Nor shall we wonder when we see them seek to turn the hope of future existence and redemption from evil to a certainty by the worship of Gods who have actually suffered and splendidly triumphed over death.

It should be understood, however, that these cults did not arise in Greek religion suddenly without preparation and precedent. There is considerable evidence for believing that prior to Homer there had existed a worship of the dead and a belief in their power to harm or help the living, and certainly shortly after Homeric times the cultus was revived. In Hesiod again, who seems to occupy himself with the traditions and beliefs of the common people, we find such ideas as those of a degeneration and fall of man from an earlier Golden Age of happiness into his present misery; of a blessed immortality rewarding the virtues of the men of the long past happier time; of guardian angels mediating between God and man, protect-

ing the righteous and punishing the wicked; and, in the battle of the Gods and the Titans, of a dualistic conflict between powers of good and evil, order and disorder. Finally there was a persistence of the primitive cult of the fertility of the earth and her creatures. Men continued to worship the Life which in crop and vine and tree dies again and again in winter only to arise and rearise triumphantly in the spring, and in herd and flock and the race of man himself goes down into the dust with one generation only to reanimate the dust of the next. The means, then, of theologically formulating and supporting the yearning for redemption from evil and for life after death were at hand from the beginning in Greek religious experience.

VII

The two great movements which expressed in an articulate and organized form the rebellion against the imperfection, the mortality, and the finitude of man's lot, and fanned the hope of escape and peace in some life beyond the brief span of human existence, were the Eleusinian and the Orphic Mysteries.

The Eleusinian Mysteries centered about the story of Demeter and Persephone. Demeter, the earth-goddess, so runs as much of the story as concerns us, had been robbed of her daughter Persephone by Hades, God of the dead. Mourning and searching for her she wandered about the world, and meantime there was winter over the whole earth and the crops died and grew no more. Finally Zeus, touched by the plight of mankind who were like to die for want of food, prevailed on Hades to restore Persephone for a portion of the year. As often as Persephone returns from below and Demeter rejoices, it is spring and summer time. But when Persephone goes down again to Hades and the dead, and her mother mourns for her, the crops and fruits and trees die with her and it is winter again.

The connection of Eleusis with the myth came from the story that during her wandering Demeter, disguised as an old beggar, had been received kindly into the house of Celeus the king of Eleusis and made nurse to his son. She would have made the

child immortal by anointing him with ambrosia and laying him in the fire, had she not been surprised at her task by the terrified mother. Thereupon, revealing her godhead to the king, she bade him institute rites in her honor, and then went on her way. Out of these rites grew a local cult of Demeter and Persephone, which, after Eleusis in the Seventh Century B. C. had become Athenian territory, was made part of the established worship of Athens. Finally, as the importance of Athens increased, it came by the Sixth Century to assume a Pan-Hellenic significance, welcomed to its fold all who could call themselves Hellenes by race, and celebrated each year festivals to which the members came not only from all Hellas but from Asia Minor and Italy and Sicily and generally all parts of the Greek-born world. Other than the restriction of the cult to Greeks there seem to have been few bars to eligibility. Women and children as well as men could become members, and we are told that even slaves and prostitutes were numbered among the initiate.

The cult, however, formed a secret society with rites of initiation through which the candidate had to pass before he could assist at the Mysteries. To reveal the rites or Mysteries was an offense punishable, at least at Athens, by death. The tradition of the inviolability of the pledge to secrecy was so well maintained even in later and more free-thinking times that we have little more than indirect and obscure testimony as to the character of the Eleusinian "liturgy." [7] It is certain, however, that the ritual was divided into two parts, a ceremony of initiation followed by a celebration of the Mysteries proper at which the initiated assisted. The initiation seems to have included a period of instruction and preparation of the neophyte at Athens marked by fasting, and total abstinence from certain foods regarded as impure. There was a ceremonial purification through the efficacy both of holy water and of the cleansing blood of swine sacrificed by each candidate as a scapegoat for his impurity. Finally, the preparation involved a

[7] For an account of The Mysteries *Cf.* Foucart, *Mystères d' Eleusis.* Part III, Chaps. X-XV.

retreat from the world and from the dangers of ceremonial pollution which it offered.

The candidates thus purified were now ready to repair in procession to Eleusis where the initiation proper took place. This consisted of rites of further purification, and of communion with the Goddesses. The neophyte assisted at the sacrifice of sacred bulls and partook of their flesh. He fasted for a day in memory of Demeter's abstinence from all food and drink during the first nine days of her grieving for Persephone, and broke his fast by partaking of the mixture of meal and water with which the Goddess also had first quenched her thirst. He enacted a symbolical descent into the underworld commemorative of the descent of Persephone. He saw and handled various sacred objects connected with the story and the attributes of Demeter. And finally he received further instruction regarding the significance of the Mysteries and the benefits to be derived from them.

The actual celebration of the Mysteries which the initiate were at last permitted to behold was, so far as we can conjecture from the evidence, something like the mediæval miracle, and the modern Passion, play. There was a dramatic representation of the story of Demeter and Persephone by the priests of the cult, depicting the rape of Persephone by Hades, the grief, the wanderings, the search of Demeter, the restoration of Persephone, and the joyful reunion of Mother and Daughter. In addition there seems also to have been a representation of a marriage of Demeter with Zeus, and of the birth of a divine infant, symbol and promise of prosperity and happiness for the devotees of the Goddesses.

But although just what the Eleusinian initiate did and saw was a secret not to be divulged, there was complete publicity as to the object and benefits of the Mysteries. The sect promised and restricted to its members the enjoyment of a vivid and happy immortality. Thrice blessed he who had been initiated into these Mysteries, who had confessed his faith in Demeter and Persephone, associated himself with their sorrow and their joy, and assisted at the sacred spectacle of death and resurrection. By some mystical grace he was set apart

from his fellows, blessed by the special favor of the Goddesses on earth, redeemed by them from black nothingness or shadowy half-existence after death, and granted as a special privilege their gift of a bright and joyous after-life. Such an one not only rested from his labors, but perpetual light lightened him as well.

With the claim of the Eleusinian Mysteries to dispense and confine the gift of a life of felicity after death to its initiates, we are familiar enough in the uncertainty which Christianity has professed regarding the fate which may befall the non-Christian in a future existence, or the doubt which some Christian sects have entertained as to the character of the immortality conferred upon those without their immediate folds. In the case of the Mysteries, as in that of Christianity, the belief of the initiate that to him alone had been confided the secret of salvation and eternal life must have been an element of great strength in increasing both the inner self-assurance of the cult and its hold upon the popular imagination. The social and moral pressure exerted in excluding the "outsider" proved then as now a potent means of insuring cohesion and *esprit de corps* among the elect within. If we add to this the glamour which any secret society with a carefully guarded ceremony of initiation and a mystic ritual possesses both for its members and the world at large, we have at hand the bases of a powerful moral and religious organization.

From the Passion Play at Oberammergau, or some of the Holy Week processions in the Italian hill towns, or from the Mass with its highly symbolized but none the less splendid and dramatic presentation of God's perpetual sacrifice of himself for his creatures, we may get some idea of the impressiveness of the Eleusinian "liturgy." We can guess with what awe and spiritual exaltation the neophyte, admitted at last into the torch-lit darkness of the great temple, his emotions fanned and his imagination kindled by the solemn rites of initiation, must have beheld the sacred story, so full of meaning and promise for him, unfold itself before his eyes. He may well, like the early Christians, have felt the thrill of a new faith and a new hope to which men had hitherto been blind, that possessed

the power to save those who lived according to it, and to give to them a peace which the world could neither give nor take away.

The actual teaching of the Eleusinian Mysteries, however, was somewhat shallow and commonplace. It failed to give any distinctively moral value and function to the idea of immortality. The fortunes of the soul after death were determined not by moral character and deserts but by a formal relation to the Mysteries. The indispensable condition of reaching the Islands of the Blest lay not in being virtuous but in being an Eleusinian. The merit of the "noble heathen" availed him nothing. Faith without works sufficed for salvation. The benefit of initiation fell upon the righteous and unrighteous alike, the same happy existence beyond the grave awaited both.

There is no evidence again for supposing that the Eleusinian teaching pretended to any inner or higher significance, or sought, as Christianity has sought, to make of the divine death and resurrection not only a promise of immortality, but a parable of the moral life of man. Material benefits on earth as well as felicity in heaven were indeed promised the believer, but he was apparently not bidden to seek in the divine example of the Goddesses a meaning and a justification for the struggle and sacrifice and renunciation attendant upon his own daily existence. But it is hard to believe that among the many sorts and conditions of men, gathered from so many lands and cities, there were not some to whom the pathos and beauty of the story did not strike more deeply home, and carry the higher message, bringing insight and consolation and strength in sorrow, just as generation after generation of Christians have drawn understanding and peace amid the misfortune and pain and injustice of life from the story of the agony, the death, and the resurrection of their God.

So, too, the vision of the future life vouchsafed to the Eleusinian initiate was matter of fact and without suggestion of inner and higher meaning. It did no more than elaborate the pictures of that cloudless serenity of Olympus, and those amenities of the climate and scenery of the Islands of the Blest

set far in the golden west beyond the storm and tumult of the world, amid which the imagination of the poets at times loved to play. The souls of the redeemed wandered over flowery fields, by streams of living waters, beneath trees laden with delicious fruits. There were gentle breezes to fan them, golden sunshine to cheer them, thickets of myrtle for shade and repose. And amid the delights they sang and feasted, listened to the music of the heavenly choirs, and enjoyed philosophic converse with one another. In a word, the Eleusinian Mysteries offered to the believer the hope of escape and salvation in a heaven which differs only in some details of dress, custom, and landscape, from the Christian or the Mohammedan Paradise of the popular imagination.

VIII

The rebellion, however, of more "spiritual" natures against the imperfections of humanity and the burden of the flesh and the world is not to be put down, nor is their yearning for release and peace to be quieted, by such a vision of Paradise. At best, life eternal in such a heaven can only alleviate the earthly symptoms of imperfection. But it neither diagnoses the origin of evil, nor by destroying its root effects a radical cure. For the religious mystic the fundamental and significant symptom of the imperfection of human nature, which points directly to the cause of evil, lies in man's insatiable thirst for spiritual adventure, his growing hunger after new forms of experience indescribable and undreamed of, his fits of weeping for new and strange worlds of existence to conquer. Human nature is not content to be simply its own definite and specific self, even though that self be wholly perfected and completed. The very waters of Paradise would not suffice to quench its smouldering resentment against the limitation of individuality which makes us only ourselves and thwarts our yearning to burst through the spiritual skin of our own personalities and merge ourselves in the Life and Essence of the Universe. We should still cry out in heaven against the loneliness of being imprisoned in a particular nature and separated by its bars from

our fellow spirits and from God. But could we only break asunder the barriers of our separate individualities and embrace and unite ourselves with the All, then we should somehow know in an indescribable and mystical way that we had come into our own.

This mystical rebellion against individuality is not a rare or remote feeling confined to a few great saints and ascetics. In its less extreme forms it is a common everyday experience of most human beings. We all of us have moments when we are chafed and harassed by the complications and responsibilities of the daily grind of existence. Cities and civilization suddenly become hateful and we are haunted by the vision of the mountains and the sea. We long to close up, as it were, the great and pretentious and burdensome establishment of the higher centers of our brains and live, like God's humbler creatures, the simple, cottage life of the cerebellum and the spinal cord, where homely and straightforward instincts, reactions, and sensations attend on no less direct and homely wants, and nerves—good, honest, pleasant-faced, calloused nerves, with no airs—come in only by the day, and sleep out—and sleep deep—at night, after their simple daily tasks are done. All the inner complexity of consciousness, in a word, corresponding to the complexity of civilized life, seems simply to confuse experience for us and to stand in the way of that "simplification and self-surrender" in which, could we achieve it, we feel that we should find healing and relief.

So we spend our vacations in "getting back" to Nature, in detaching so far as may be the compelling and pitiless hand of daily life from our shoulders, and in escaping from the bustle and confusion and constraint of our ordinary surroundings. We go out in summer to cruise or camp. We put off the clothes and conventions and complexities of the daily grind. And we suddenly feel that in losing the everyday routine life, we are finding our real and essential life, and regaining, as it were, a birthright of which civilization has robbed us. We draw a long breath of relief, as we drop down the harbor or pitch our first camp, and say to ourselves, "This is the life."

The mysticism of the "man in the street," in many cases

perhaps, does not penetrate more deeply beneath the surface of things than this. But if he is also even unconsciously a poet, it may carry him a step further. It is not merely that "the hum of cities" has been discovered for the moment to be torture. Suddenly, as he goes overboard for his first dip, or opens his eyes the first morning upon the hill-tops edged with sunrise, he may feel, like Byron, that he lives not in himself but as a portion of a larger Life around him, and that "high mountains are a feeling," not really outside him but part of his deepest self. He is one in some mysterious way with sea and sky and land, with hill and valley and stream. And yet as long as he is shut away from them by the barrier of his particular body, and their hidden spirits are barred off from his own by their separate existence, that unity remains unrealized. Could this too solid flesh but melt and thaw, or could this soul "be changed into little water-drops and fall into the ocean," perhaps he and they might meet and merge. Or might there not be some deeper form of existence in which all of them including himself were soluble? Might it not be possible for us all alike to render up the separate natures and individualities which keep us apart, and disappear together, dissolved and dissipated in this profounder reality, as all the many shapes and colors of clouds at sunset withdraw and dissolve into the empty and transparent air which is their true home and substance?

If now we translate this feeling from the language of poetry into that of ethics and religion, there can be no mistaking the message it bears to the devout and aspiring spirit. It reveals to him the secret of man's sin and imperfection, and the way of his salvation. This yearning to embrace and become the All, to lose and dissolve himself and the separate natures of all other things in the absolute simplicity of some deeper form of being, is to the mystic no vain flight of the poet's fancy. It is rather the most important and significant phase of our experience. It is the homing instinct of the soul, guiding her unerringly through the trackless vacuity of the manifold world with all its swirling confusion of a myriad phantom forms and things, back to the undivided unity and calm of

God, there to yield up her distraught and restless individuality and forget her separate self and the separate selves of all other things in him.

So, too, the existence of many natures and things in their difference and isolation from one another is no mere innocuous restraint upon the all-embracing imagination of the poet, to be bewailed in melodious verse. It is rather the shadow of a spiritual death upon our life, the evidence of metaphysical catastrophe, of some degeneration and fall of the divine Unity from its original simplicity and peace into the great restlessness of a world caged in space and time and multiplicity. Or it is at least the sign of some monstrous deformity of our vision which makes us see what is really One as if it were Many, what is really perfect as if it were imperfect. That the world is not God, or at any rate seems to be not God but a thing apart from God, all shivered by its fall from the divine into a thousand individual fragments; in fine that the world exists at all—that is the primal evil, the original sin, the source of all the sufferings of the world. For how can that which is not God be wholly good?

The way of salvation is now plain. Redemption is to be found by overcoming this difference of ourselves from God, and regaining in ourselves that identity with God which is the lost birthright of the entire world. But in order to regain oneness with the divine, we must lose the whole world of our everyday experience. For in that experience, to whatever extent we order and simplify it by reason, there are always many things, forms, natures, laws, atoms, molecules or what not, and always the fatal distinction between ourselves and the objects of our thought. Even were all the complexity of the external world reduced to the movements of a single atom, I should still be different from it, the outside observer of its lonely flight through space. I must then discard all known forms and categories of my experience as means of access to God. He cannot be perceived, or known, or even felt, for in all these experiences there is present at least the distinction between the perceiver or feeler and what he perceives or feels. Only in some indescribable, ecstatic state of being of which the ordi-

nary forms of our consciousness give us no hint can the soul lose herself and find salvation and become God.

For the mystic, then, a heaven painted in terms of earthly experience, however purified and idealized, is as unsatisfactory as that experience itself. The soul still retains her separate personality, and moves amid variety and multiplicity, however splendid. Even the higher Christian notion of Paradise as the Beatific Vision in which the soul is intent upon God and God alone, falls short of the mystic mark. For again, though the soul sees God and God only, and is flooded with his Presence, she retains her individuality and is still herself and not the object of her vision, forever separated from him by her finite and created character. Not till that last enemy is overcome and God is all in all, and she is no longer herself but God himself, will the thoroughgoing mystic allow that she has fulfilled her destiny.

Hence the Eleusinian Mysteries, appropriate as their doctrine and liturgy were to the development of mystical feeling, failed to meet the extreme demand of mysticism, just as they failed to make the story of Demeter and Persephone a symbol and interpretation of the deeper moral experiences, or to base even the promise of immortality on moral considerations. In the Orphic Mysteries, however, the yearning for redemption from evil, and the mystical desire to slough off not only the body but human personality and to melt the soul in God, received far more adequate expression.

## IX

As the Eleusinian Mysteries grew up about the story of Demeter and Persephone, so the Orphic cult focused the attention and devotion of its adherents upon the figure and story of Dionysus, the son of Zeus and Semele. Dionysus seems to have been originally a stranger God, brought down from the wild, northern "frontier" country of Thrace, and made at home among the still youthful and growing band of the Olympian deities. Like Demeter and Persephone he was a God of the fertility of the earth, of the harvest, of the trees, and

especially of the vine and the vintage and wine. Like Demeter and Persephone again, he was God not only of the living and fruitful earth, of spring and summer and autumn, but of the seeming death of all things in winter. He, too, died each year, and each year rose again triumphant over death.

The rites with which his worship was celebrated were originally primitive and barbaric. The priests of the cult were considered at times, when, through frenzied dancing, intoxication, and other orgiastic means, they had thrown themselves into a sort of trance, to be possessed by, and even to incarnate, the God. It seems possible that in early times the priest so possessed was sacrificed and even eaten. Later a sacred animal, a kid or a bull, supposed also to incarnate the God, was torn to pieces by the frenzied worshipers, who believed that by partaking of its flesh and blood they absorbed into themselves the strength and divinity of Dionysus himself.

As early as the Eighth Century, almost before the migration of the Ionians to Asia Minor, this cult seems to have penetrated Greece. There it spread with all the rapidity of any wave of religious enthusiasm and revival throughout Hellas proper and the Mediterranean coasts colonized by the Greeks. The reasons for its swift advance are not far to seek. Its ritual was one of exaltation and self-abandonment. The dancing, the drunkenness, the general excitement of "letting one's self go," seemed to liberate the believer for the time being from the commonplace, monotonous routine of daily life and to create within him a new self more powerful, more happy, more master of its world, more deeply living and glowing, than the ordinary, everyday self. The worshiper was a new person, was possessed by a superhuman, divine being. He had thrown off for the moment his humanity and was one with the divine, nay, was actually for a supreme and fleeting instant himself "very God of very God." And might it not be that after death, rising again with Dionysus, the moment would be made eternity and the devotee would find himself forever this diviner self?

By its contact with Greek civilization the grosser and more barbarous elements of the myth were refined away. But the fundamental spirit and appeal remained with their promise

of immortality, their new hope of transcending the limitations of human life, of casting off human nature altogether and becoming God, and their ritual of "omophagia," or communion with the God by partaking of the flesh and blood of the sacred animal. The frenzied dance and drunkenness persisted as a means of inducing the superhuman ecstasy and exaltation in which the possibility of escape from the ordinary world and the essential divinity of human nature were revealed. There seem also to have been rites commemorating the birth and the resurrection of Dionysus.

We do not need, I think, to insist upon the adaptability of such a cult to those needs of the "sick soul," self-convicted of sin and impurity, or of the mystic spirit aspiring to absorption in the Ineffable, which we have just discussed. We may pass at once to the elaboration of its doctrine and liturgy which we find among the Orphics.

Of the beginnings of the process of "moralizing" the worship of Dionysus and assigning to it an inner and spiritual significance we know nothing. Tradition has it that Orphism was introduced into Athens from Italy and Sicily in the middle of the Sixth Century B. C., and it seems probable that at that period it was already well developed in those countries. The Sixth Century, which was a period of general religious revival marked by a notable purification and moralization of the Olympian theology, and by the first philosophical speculations and systems, afforded fertile soil for the growth of the cult. Though never, like the Eleusinian Mysteries, made part of the established religion of the Athenian State, it spread with great rapidity, and by the Fifth Century had permeated and obtained a very considerable influence throughout the Greek world.

By this time the original myth of Dionysus had developed into a complicated theology. The origin of all things this theology left in doubt, calling it now Night, now Chaos, now Water and primitive Slime, now Time. The first steps by which the world evolved out of the basic element were left similarly vague. Eventually, in one version of the myth, from the union of Time and Necessity, in another, from that of

Chaos and Æther, there proceeded a gigantic egg from which there appeared a God variously called Zeus, Pan, or Phanes. But however they might call him, the Orphic cosmogonies were agreed that he was the World-All, the One Substance from which all things proceeded. From this God were now produced the later generations of deities in the "orthodox" order given by Hesiod: first Uranus and Gæa, who were overthrown and followed by Cronos and Rhea, who in their turn met a like fate at the hands of Zeus. When Zeus at length had subdued all things into himself, he devoured Phanes and so became himself all in all, the One from which all things proceed. Then he in his turn generated the Olympian dynasty and the present world. Last and mightiest of all his children, he begat by Persephone, Dionysus.

So much by way of introduction to the advent of Dionysus. The tendency of the teaching so far was, we see, pantheistic and mystical. God was the World-All. All things originally and fundamentally were one in him. Now for the divine story itself. To Dionysus in his childhood Zeus entrusted the dominion of the world. But Hera was jealous of the child of Persephone and at her instigation the Titans plotted his destruction. This they endeavored to accomplish by trickery. They gave him a mirror for a plaything and while he was gazing at his own reflection they fell upon and sought to kill him. He, seeking to escape, assumed one form after another, but finally in the shape of a bull was overcome by them, torn to pieces, and devoured. Only his heart was saved, and brought by Athene to Zeus.

Then Zeus ate the heart of the first Dionysus, and immediately begat by a human mother, Semele, the second Dionysus, Dionysus Zagreus. Semele begged to see her lover in all the majesty of his Godhead, and perished, consumed by the thunderbolt in which Zeus revealed himself to her. The unborn Dionysus, however, was saved, and transferred to the thigh of his father, from which he was eventually born. And he was again made Lord of the world.[8]

But the Titans Zeus blasted with a thunderbolt, and from

[8] Abel, *Fragmenta Orphica,* 190.

their ashes he made Man. And Man because he was made of the ashes of the Titans is sinful and imperfect; but because the ashes contained also the substance of Dionysus whom the Titans had devoured, there is also within him the spark and possibility of the divine. With the final establishment of Dionysus as Lord of the world and with the creation of Man the present world-period begins. The central interest now becomes the condition and destiny of Man. Man is imperfect, his life is beset with sin and misery, but he is haunted also by the hope of finding the way of salvation. To cherish and amplify this hope, and to show this way now became the chief business of Orphism.

The cause of human evils, and the cure for them were plain. The Neo-Platonic mystics of a later age saw in the episodes of the death of the first Dionysus—the reflection and consequent reduplication of his face in the mirror given him by the Titans as a plaything, his assumption of various shapes in his flight from his enemies, and the rending of him at their hands into a thousand pieces—a symbol of that emergence of the diversity and plurality of the phenomenal world from the absolute and unbroken unity of God, with which the origin of evil in their eyes was associated. We may doubt whether the Orphics themselves read the story in so abstract and metaphysical a manner. But certainly for them the evil in man had its roots in his inheritance from the Titans, and the moral conflict between the good and the evil within us was a struggle between the Titanic and Dionysiac elements, which repeated the struggle between the God and his enemies. And in that struggle the good, the Dionysus within us, was wounded and rent even as the God had been torn to pieces. Finally, the hope of salvation lay in the possibility of freeing the fragment of the divine imprisoned within us from the bonds and foes which kept it from its origin, and of reuniting it with its source, even as Dionysus had been saved and restored out of the death and mutilation which he had suffered at the hands of the powers of evil.

These bonds and foes, so far as human life is concerned, the Orphics found in the desires and experiences of the body. The

Titanic element was the physical, the flesh, the senses, and the "world" connected with them; the Dionysiac was the mind or soul. The body they likened to a prison or tomb in which the soul lay captive or buried. This dualistic opposition of soul to body, as the opposition of a principle of good to one of evil, stood in interesting contrast, as we have seen, to the general tenor of Greek ethics and religion. It cannot but remind us of St. Paul with his contrast, some centuries later, between the "Old Adam," "the burden of the flesh," "of the earth earthy" with the "new man," "the Lord from Heaven."

We may read here as we run the direct application, omitted by the Eleusinian Mysteries, of the episodes of the divine story to the incidents of moral experience. The myth of Dionysus became for the Orphic the warp and pattern of human life. He was taught that the situation with which he was confronted, the presence of evil in the world about him and in his own nature, was a result and as it were a prolongation of the agony of his God. So, too, the intermittent golden thread running athwart the warp of life, bright with the fitful hope of immortality and the fleeting radiance of good triumphant over evil, did but repeat again and again Dionysus' conquest over death, and reassure his worshipers that he reigned. Each Orphic initiate, then, might well have seen in the divine history the type and explanation of his own personal experiences of trial and shortcoming, success and content, and felt that in his humble way he too died and lived again daily with Dionysus; nay, that the moral struggle within him was in some mystical way actually part of the very struggle of the God against the Titans.

Thus a new glamour was imparted to experience. The moral became at the same time a romantic life. Temptation acquired grandeur, suffering took on dignity, while resistance, endurance, and victory revealed nothing less than the essential divinity of man. Attention, in a word, was concentrated upon man's situation in this world, and the moral life resolved itself into a conflict between two superhuman principles, one of good, the other of evil. Furthermore, the soul was sharply

distinguished from the body by a moral as well as a physical line of cleavage.

To such a point of view salvation and its appurtenances necessarily appeared much more complicated than they did to the Eleusinian. The latter showed no curiosity as to the nature or origin of the moral evil present in the world. Had we asked him to define and explain wrongdoing, he would probably have replied in the orthodox and objective way that it sprang from bad judgment due to a confused and deficient knowledge for the time being of what was really best. That the existence of sin presented a theological problem, or that its nature had a deeper significance, which might even affect the eligibility of candidates to the blessed immortality which his Mysteries promised, would not have occurred to him.

But the Orphic felt a theological curiosity and had formulated a theological doctrine regarding the origin of evil, and he prescribed his cure for it with reference to what he thought to be its cause. Sin was an organic not a functional disturbance of human nature. It was the symptom, not of an acquired short-sightedness of the soul removable by external means, but of a congenital blindness which no earthly means could cure. The soul was separated and estranged from God. Corrupted by the heritage of evil from the Titans, the mind's eye had lost its vision of the divine. Or to use another figure actually employed by the Orphic, the soul had drunk of the waters of Lethe and been drugged by them. She had forgotten her origin and goal.

Tainted by so mortal a disease, the soul could not hope to find health and restored vision and memory in any mere change of scene and climate in an Eleusinian Paradise, however bright the sun and spiced the breezes and luxurious the heavenly home. Indeed in such circumstances her lethargy and her blindness to her true destiny would only become more complete. Salvation could be found only in restoring her memory and vision of the divine, and in reuniting her with Dionysus, of whom, though laid low by the "star-flung thunderbolt" [9] of fate, she was still a fragment. In order to restore this sight

[9] Harrison, *Prolegomena to the Study of Greek Religion*, p. 669.

and recollection a mystical and supernatural change in the inner character and disposition of human nature must take place. The hereditary taint, the curse of the Titan, the burden of the flesh and the senses, must be sloughed off, and the soul appear at length in her true character as "the image of Dionysus," reënacting in the process of her salvation, as it were, the resurrection of the God.

Like the Eleusinian, and later the Christian, the Orphic was certain that this restoration of the soul to God was impossible without outside aid. The soul could not recover of her own native powers. Her taint was of supernatural origin, and demanded a supernatural cure. There must be a physician, a prescription, and a regimen. The nature of the cure and the methods of its administration were, the Orphic thought, known to his sect alone, and in this again he reminds us of the Christian and the Eleusinian. Only those initiated into his Mysteries could hope to be healed of that primal taint wherewith all humanity is infected, and regain their no less primal birthright of reunion with the divine. Those who rejected Dionysus must bear forever the burden of man's heritage from the Titans.

The Orphics, however, promised their initiates no such quick and easy access to Dionysus as did the Eleusinians to their Paradise. To cleanse the soul of the original sin inherited from the Titans, to restore her to the Gods, ready to "avow herself of their blessed race" [10] and be found worthy of acceptance in their sight, required a time and a discipline to which no determined end could safely be set. So it was that, like the Buddhists, the Orphics foresaw even for themselves an indefinite process of transmigration and reincarnation in which the soul was born again and again, reaping in each new life the fruits, bitter or sweet, of the degree of her adherence to Orphic precept and practice in former existences. And like the Buddhists again, they allowed their fancy to play with the disembodied interval which separated rebirth from death. They imagined the soul led to the underworld by Hermes to be judged. The uninitiated they saw lying in a

[10] *Cf.* Harrison, *op. cit.*, p. 669.

morass of mud waiting reincarnation. The initiates they pictured as enjoying greater or less felicity, or undergoing purgatorial cleansing according to the state of purity attained on earth. But these intervals, however bright, even though they were spent in an Eleusinian Paradise on the Islands of the Blest, were at the best only passing episodes along the way of salvation. They were but spokes of the "sorrowful, weary wheel" of birth and rebirth from which it was the desire and destiny of the soul to be gone. Only by breaking through the vicious circle of transmigration and reincarnation altogether could the soul attain enlightenment and rest eternally in Dionysus. Then and then only, having at last turned away from the well of Lethe and drunk of the living waters of Memory of her divine nature and oneness with Dionysus, could she hear the voice confirming her redemption, "Happy and Blessed One, Thou shalt be God instead of mortal." [11] "Thou art become God from Man." [12] It was the business of the Mysteries to teach man how to effect this escape. "This is what those who are initiated by Orpheus to Dionysus and Kore pray that they may attain—'To stop the Wheel and breathe once more from ill.' " [13]

The ritual of the Orphic is even more difficult to reconstruct than that of the Eleusinian Mysteries, so fragmentary are our data. But so far as we can make out, the neophytes performed various acts symbolical of their escape from the wheel of birth and rebirth, and of their union with Dionysus. They seem also to have enacted a dramatic representation of the death of Dionysus at the hands of the Titans, and to have partaken of the raw flesh and blood of a sacred animal representing and supposed to incarnate the god. And this "Omophagia" appears to have had the significance not only of a communion with the God, but of a mystical sacrifice repeating his death.

Along with the performance of these ceremonial acts by which the Orphic signalized and aided his renunciation of the world, the flesh, and the Titan, and sought to restore his soul

[11] Harrison, *op. cit.*, p. 669.
[12] Harrison, *op. cit.*, p. 662.
[13] Abel, *Fragmenta Orphica*, p. 226.

to her essential and original divinity, the sect also enjoined upon its members a special discipline of life appropriate to their theoretical retirement from the world. This discipline was supposedly but not onerously ascetic. It commanded, in addition apparently to the ordinary virtues, an abstention from animal food and an avoidance of certain vegetables and of certain materials for clothing which were especially associated by tradition or superstition with decay and death and therefore regarded as unclean.

So far as the relation of practice to precept is concerned, it is probable that in Orphism as in most religions the two were far from identical. Men lived up to its teachings in varying degree and were more or less faithful in the observance of their religious duties, according to circumstance and temperament. Still it must be remembered that Orphism was a "dissenting" sect; that is, that it was not incorporated, as were the Eleusinian Mysteries, in the worship established and supported by the Athenian state. It was rather a protestant movement actuated by a new hope and vision which it considered more complete than that afforded by the established religion. Its adherents, then, may well have shown that greater enthusiasm and strictness in practice which are apt to mark reformed sects and produce what we call the "nonconformist conscience."

We must not, however, infer from the fact that Orphism was never recognized as part of the established worship of the Olympian gods, that it was therefore considered heretical. Heresy was a concept absent from Greek religious thought. The richness and fluidity of Greek theology naturally lent itself to all sorts of special cults. Worship might be concentrated upon the person of any one God, provided only the existence of the others was recognized and their divinity honored. Moreover, the worship of Dionysus was widespread and fervent at Athens, and his festivals played an important part in the state ritual. If some people wished also to find in the episodes of his life a mystical inner and universal significance and draw from them the hope of a mysterious salvation in the next world and the sanction of a peculiar and semi-ascetic life in

this, it was after all their own affair. And on its side, Orphism had no quarrel with the Olympian theology, which it accepted as a background to its particular cult. In the same way the Christian to-day may with perfect orthodoxy display a special devotion to one Person of the Trinity or the Blessed Virgin or some Saint, in meditation upon whose attributes or life he finds a source of courage and consolation suited to his individual needs.

Still, the Orphic undoubtedly came in for his share of the suspicion and contempt with which "dissenters" and "nonconformists" are apt to be regarded by members of an established communion. His doctrines, if still within the pale of orthodox belief, were none the less eccentric and extravagant, and ran counter to the traditional view of human life and destiny handed down from Homer and the sages. That view, as we have seen, contrasted the human and the divine estate, and had shown to the Greek again and again the line forever drawn between the mutability and mortality of his life and happiness and the untroubled and deathless felicity of the blessed Gods in which there was neither any change nor shadow of turning. Preacher and poet had warned him not only against seeking to overstep that line, but against excess of even such prosperity as is permitted to men, lest very great good fortune seem to exalt him too close to the jealous skies or to engender within him that blindness to his own frailties which is the root of all evil. Seek not to be God; seek not to be other than mere man, or more than mortal. Know the position in the Universe to which it has pleased the Gods to call men and man, and be submissive to its limitations. In obedience to such precepts and to the caution, moderation, and controlled aspiration which they inculcated, lay the way of wisdom and virtue. To a disregard of them, to a vain seeking to trespass beyond the reasonable bounds imposed upon the individual man, and mankind in general, the manifold paths of folly and sin might all be traced.

But here was a speculation which ignored, or rather defied, these maxims, and audaciously claimed that what seemed to wisdom the reasonable and generous bounds accorded human

nature were in reality intolerable and cramping bonds. Here was a teaching which found in aspiration beyond the limitations of our nature the very breath of life for conduct and religion, and held before all men alike the vision of a destiny mightier than human, nay, even the obliteration in the end of the distinction between the human and the divine. At the old, wise warning "seek not to be God . . . mortal things befit a mortal," so expressive of the balance and the aversion from excess which we regard as typical of the Greek point of view, it flung the challenge of its startling message, "Happy and Wise One, thou shalt be God instead of Mortal." "Thou art become God from Man."

Doubtless, too, the ritual like the claims and promises of the sect appeared extravagant and sensational, and made much the same impression upon the adherent of the established forms of worship, as the Oxford movement and High Church practices made upon the rank and file of the Church of England, or to use a more extreme example, as revival and camp meetings to-day make upon the typical Bostonian. Euripides is perhaps expressing the attitude not only of the free-thinking, but of the orthodox Athenian in the "fling" at Orphism in Theseus' bitter reproach of the apparent treachery of his son, in the "Hippolytus":

> "Now is thy day! Now vaunt thee; thou so pure
> No flesh of life may pass thy lips! Now lure
> Fools after thee; call Orpheus King and Lord;
> Make ecstasies and wonders! Thumb thine hoard
> Of ancient scrolls and ghostly mysteries. . . ." [14]

Still Orphism does not seem to have perturbed the Athenian Church to anything like the degree that the High Church movement shook the Anglican.

However, it must be admitted that by the beginning of the Fourth Century Orphism had been badly infected with really serious abuses. The lines just quoted from the "Hippolytus" may, then, be not so much a casual fling against eccentricity and sensationalism as a well founded protest on Euripides' part

[14] II, 952 *seq.* (trans. Murray).

against tendencies towards corruption already developing or developed in his day. The ritual and dogma of the sect were only too apt to degenerate into a highly scented and vulgar formalism, lacking not only in inward warmth and sincerity of religious feeling, but also in the outward dignity and restraint which characterized even such a picturesque rite of the established church as the celebration of the Eleusinian Mysteries. Worse still, they invited to superstitious beliefs and practices of all sorts, like magic and divination, the purchase of indulgences, and the hawking of absolution and salvation. The result was, that, though nothing could dim the splendor and the consolation of its promise to the "sick" and yearning soul, or cool the fascination which its doctrines of reincarnation, redemption, and reunion with the divine, exercised over a mind like Plato's, Orphism also became a rallying point for a host of religious quacks, and malpractitioners whose wares have a familiar look even to-day.[15] These hangers-on ran on about Dionysus' name talking a clap-trap designed to entice or frighten the simple and the credulous into a kind of spiritual "confidence-game." They told fortunes, practised divination, and offered even to rid you of your enemies through absent treatment by incantation; all, of course, for a consideration. Furthermore, they rattled the keys of heaven and hell in a truly impressive and terrifying manner. They would come to your door, particularly if you happened to be rich, carrying a prodigious lot of old books purporting to have been written by Orpheus himself. They would descant upon the horrors of hell-fire, from which they assured you only their charms and rites could save you, and, thumbing their "hoard of ancient scrolls and ghostly mysteries," they would do their best to frighten you into buying, cash down, plenary absolutions for all your own and your ancestors' sins in this world, and infallible prescriptions guaranteeing a general immunity from purgatorial pains, and the enjoyment of everlasting felicity in the next. And the pictures which they drew of the fate awaiting the rash man who refused to hand over an initiation fee, were doubtless vivid, and if you happened to be a bit uneasy in your

[15] *Cf.* Heracleitus, Fr. 124.

own mind about the world to come, convincing. However that may be, these salvation-mongers seem to have carried on a brisk and lucrative trade, even among the well-to-do, though their profits, as may be imagined, did not improve the credit of Orphism with less superstitious and better balanced people.[16]

The influence of the Orphic mysteries on philosophy was considerable. We shall find them looming large in the teachings of the Pythagoreans and Empedocles, and perhaps coloring to some extent the systems of Heracleitus and the Eleatics. Later on Socrates and Plato drew upon them for their visions of the immortality of the soul. And in the mystical Neo-Pythagorean and Neo-Platonist movements, which gained such headway in the first centuries of the Christian era, they came into their own again.

## X

The apparent ease with which Orphism escaped with nothing worse than a charge of sensationalism and vulgarity is perhaps but an expression of the same point of view as permitted the extraordinary freedom of Greek philosophic speculation from religious restrictions. We to-day wonder that by virtue of its mere acceptance of the Olympian theology as a background to its special teaching, Orphism was able without serious protest and censure to paint so unconventional a picture of subjects like the nature and destiny of man and his relation to God, which for us stand in the foreground of importance and may not appear before the public at large unless in orthodox guise. So, too, we might wonder again and again, when we come to trace the development of Greek thought, that contemporary theology so seldom felt shocked and demoralized at the picture drawn by philosophic speculation. When Thales, for example, announced that in his opinion all things were made of water, or Anaximenes proclaimed that they were nothing but condensed or rarefied air, we should not unnaturally expect theology to feel that its gods were being evaporated or dissolved, and to fight such destructive teaching

[16] *Cf.* Plato, *Republic,* II, 364 *C et seq.* Legge, *Forerunners and Rivals of Christianity,* I, p. 140. Campbell, *Religion in Greek Literature,* p. 254.

with might and main. That, when confronted with Orphic doctrines or philosophic speculations, religion showed no fear throws the relations of religion to philosophy and science in Greece into interesting contrast with the modern situation.

The reason, however, for the difference is not far to seek. Philosophy did not come into conflict with established belief for the same reason that Orphism escaped collision with it. The matters with which philosophy, like those with which Orphism, was mainly concerned were points of little or no concern to "orthodox" belief. Such questions as the origin, the composition, and the constitution of the Universe, which modern theology finds of great moment and has answered with an authority and finality based upon divine revelation, were from the point of view of Greek religion mere fields for conjecture, upon which opinions might take different paths and arrive at different conclusions without trespass or prosecution for damage done to any revealed truth. Provided only a man believed in the accepted Gods, or at least did not deny their existence, he could speculate at will and hold any opinion he chose as to what stuff they were made of, or how they originated and developed into the beings they now are. If Thales was right, the Gods like everything else were made of water, if Anaximenes, of air, but a God was a God, just as a man was a man "for a' that." What they were made of, or how they were produced out of the primal World-Stuff made no difference to their existence or their divinity. These were interesting and inevitable questions, like those discussed by the Orphics, but they raised no point of concern to the established cult and could be answered in diametrically opposed but equally orthodox ways.

Moreover, it is perhaps too much to insist even on the necessity of belief in the Olympian Gods. Certainly in Sicily, as early as the Sixth Century, the philosopher Xenophanes rejected undisturbed the conventional polytheism and taught that the divine nature was not collected and focussed in the persons of different Gods, but was suffused and omnipresent throughout the entire Universe. At Athens, however, the case was different. The Athenians were conservative in temper in all per-

taining to the state religion, and Anaxagoras in the Fourth Century was accused of impiety for maintaining that the sun was not a God but a lump of red-hot iron "larger than the Peloponnesus." Socrates, too, was condemned to death, a few years later on the charge, among others, of denying the Gods which the city worshiped.

However that may be, and even granting Athenian conservatism, it must be obvious how favorable was the atmosphere of Greek religion to the development of philosophic speculation. Religion was first in the field, to be sure, and philosophy had to recognize and reckon with it. But its influence was that of suggestion as to what might be believed, not of dictation as to what must be accepted. It did not claim, like Judaism and Christianity and Mohammedanism, a revealed and final knowledge of all that is important in the constitution of the Universe and the destiny of man, and bar from free philosophic discussion and conclusion most points of philosophic interest. It was opinion with no higher authority than that of tradition, most of which could be discarded or remolded by philosophy without offense to the religious interest. There were no trespass signs bidding the adventurous thinker beware the dogmas of a revealed truth, no stiles of scripture and creed to keep the traveler to one only permitted path.

The rise of ancient philosophy, then, is almost unembittered by that conflict with theology which has marked the growth of modern thought. Speculation could develop openly without resort to subterfuge and equivocation in order to escape active persecution, and without incurring the modern penalty of ostracism and defamation at the hands of established cults. For where the modern man feels his faith shocked and shaken, the Greek felt only his curiosity gratified and his knowledge enlarged, using, as it were, for walking and advancing, the toes which in us exist only to be trodden upon.

## XI

We have now hastily and partially surveyed certain features of Greek religion which we shall find reflected from time to

time in varying degree in the history of Greek philosophy. We have noted similarities and differences to the religious beliefs and practices of to-day. The background of all Greek religious experience was, we saw, much more objective and external than the point of view to which we are accustomed. The Hellenic mind was less self-conscious, less introspective, less isolated from the world about it than our own. It dwelt less upon itself and contrasted its spirituality less sharply with the experience forced upon it by the instincts and senses of a "physical" body and a material world. The Greek language, indeed, lacked any adequate terms for expressing the ideas of "self" and "personality," "conscience" and "duty" which so distress modern religion and philosophy. Indeed, we might say that, in its dominant mood at least, the Hellenic genius never burdened the body and the natural life and self-expression of man with an alien "spirit" to crush its roots, pinch its growth, and wither its flowering.

Again, just as the Greek did not set himself over against an external, "material" world, so he did not distinguish sharply things from persons: All bodies were living like his own, all natural phenomena were essentially beings like himself. The Universe was conceived as fundamentally a city-state, a constitutionally governed society of living beings, including Gods and men, whose character, relations, and rules of conduct could be inferred from human nature.

He naturally sought, then, his Gods in the external Universe rather than in the recesses of an inner, private experience remote from the world, and found them to be like men, children of the same World-Order and evolution, citizens of the same commonwealth, co-actors in the same drama, elder brothers of the same family. They, too, had grown in wisdom and goodness. The Universe, like human society, had developed out of primitive savagery into law and order and civilization. Being part of this larger order, the creatures rather than the creators of Nature, their omnipotence was limited and their omniscience reserved to such power and knowledge as enabled them to play their parts as constitutional rulers of the world. In all this, we pointed out, there is a great contrast to the

Christian idea of God as the absolute Creator and arbitrary Ruler of the Universe.

Emerging from the common background we observed two tendencies of thought. On the one hand we had the Olympian worship, on the other a "religion of redemption." The cult of the Olympians became more and more a worship of Beings who led that easy and deathless, liberated and perfected human life towards which man aspires and struggles, and protected such order, civilization, and happiness as social and political institutions had attained.

Along with this "established" worship of the Olympians went the traditional attitude of Greek ethics. The Universe had allotted Gods and men alike their places and their limitations. Virtue lay in each man's keeping to his place; the root of evil, in his tendency to trespass upon his neighbor's, be that neighbor human or divine. The difference between virtue and vice was purely quantitative, since the excess which led a man to overstep the bounds was but an exuberance of the instincts and activities which kept him interested and busy in developing his own lot in life.

From this point of view there was no moral opposition of the flesh to the spirit, of the "natural" man to a hostile soul of supernatural origin and destiny. Sin had its root in a man's ignorance of the bounds set to his individual lot and to human nature, not in an inner disobedience to the will of God which corrupted and stained a spiritual essence. Similarly the compensation exacted by the sense of fitness and balance inherent in the Universe was sufficient to clear the sinner's account and start him anew. He needed no inner absolution from God.

Here again we found a great antithesis to Christian teaching, particularly in its ascetic and puritan form, with its fear of the natural man, its suspicion of beauty, its horror of physical pleasure, and its feeling that the body and the material world obstruct and endanger the happiness and salvation of man. From the Christian point of view the essence of sin lay in the harm it did the sinner; from the Greek point of view, as might be expected from the greater objectivity and

lack of self-consciousness of the Hellenic mind, it lay rather in the hurt it might do to others.

The general background and "orthodox" Olympian tendency in Greek religious experience had, as we also pointed out, a strong echo in Greek philosophy. They were associated with the tardiness with which Hellenic thought distinguished natural from moral law, and consciousness from matter, and they inspired such typical expressions of Greek ethics as Socrates' dictum that "virtue is knowledge," and the Aristotelian doctrine of virtue as a golden mean between excess and deficiency.

But we discovered that beneath this serene and sunny stream of Greek naturalism, there swept a darker counter-current of religious experience. It was not enough to worship Perfection and build slowly towards it generation after generation. Those whose lot was less easy, who were harassed or overwhelmed with temptation and failure and sorrow, cried out for justice and redemption. And since salvation and happiness could not be attained in this life, they looked for it in the next. The ideas of immortality and reincarnation, which Olympianism ignored, were seized upon and developed. The accent of worship was shifted from the God whose perfection was lifted clear of human suffering, to the God who had suffered and died like ourselves, and whose resurrection might seem to hold out to humanity the promise of an ultimate triumph over death and redemption from evil.

The material to feed these longings was found in the ancient cults of the infinite life and fertility of Nature, which seemed to perish in winter only to be revived again in the spring, and whose animal forms appeared, by the recurrence of their generation, birth, and death, now to deplete, now to restore, the level of an inexhaustible, hidden reservoir of existence. In particular the "religion of redemption" seized upon the cults of Demeter and Persephone, and of Dionysus.

About the first, which later became part of the established church of Athens, centered the hope of a happy immortality of the ordinary Christian or Mohammedan sort. The Orphic Mysteries, however, of wild Thracian origin and orgiastic ritual, developed a complicated theology in which the ideas of

reincarnation and reabsorption into the Godhead played a prominent part, and a dualistic opposition of the soul to the body was a prominent feature. To this cult rallied all that was ascetic, puritanical, and mystical in the Greek temperament.

The ethics of such a movement were naturally out of harmony with the dominant mood of Greek morality. They urged man to seek self-realization and happiness, not by a balanced development of the resources of the natural man within the limits of finite human nature, but by breaking the attachment of the soul to the body, stopping the wheel of birth and rebirth, transcending the human lot, and becoming God instead of mortal. And to this end they prescribed a semiascetic discipline. They could not, however, push the Greek genius to the extremes of Pauline Christianity, or imbue with our modern Puritanism its natural joy in living, its satisfaction in exercising the activities of the body, and its pleasure in the physical beauty of the world.

Orphism, however, spread through the Greek world with great rapidity, and assumed the proportions of a great reforming and protestant movement. And it had considerable influence upon the development of Greek philosophy, to which we now turn.[17]

[17] A short bibliography for the further study of Greek religion is included in the Appendix to this volume.

## CHAPTER III

## THE SCHOOL OF MILETUS, THE FIRST PHILOSOPHERS

At the beginning of the Sixth Century B. C. there was no city on all the coast of Asia Minor which could compare with Miletus in strength and magnificence. Her foundation already lay in the immemorial past. Her traditions assigned her origin to Crete, and modern research has borne out her claim and traced her parentage to the great sea empire of Minos—thought by some to be the fabled Atlantis—which in the third and second millennium before Christ dominated the shores and islands of the Ægean. Later, when "the Princes of the Isles set in the Midst of the Great Green Sea" slept in their splendid tombs, and the ancient Minoan civilization had crumbled before the Greek invaders from the north into the ruins of cyclopean Tiryns and golden Mycenæ, the palace of the Double Axe at Cnossus, and the "topless towers of Ilium," Miletus, along with the rest of the coast as far north as Smyrna, passed into the hands of Ionian traders and explorers as they ventured eastward isle by isle from their lately won and settled possessions in Greece itself.

In time colonies grew up, united to their mother cities by ties of blood and family history and tradition, and to one another by the bonds of a common race, language, religion, and civilization. Among them, twelve, the so-called Ionian dodecapolis, were preëminent, and again of these the old Miletus, now newly colonized from Attica, was first in wealth and power.

The situation of these cities was, however, precarious from the start. Inland, the threat of the growing Lydian kingdom was becoming more and more ominous. The campaigns of Gyges, the founder of the Lydian power, had brought him into conflict with the coast colonies and had perhaps subdued

two of them, Colophon and Magnesia, to his rule. Under his successors, Ardys, Sadyattes, and Alyattes, the struggle and the process of slow subjugation continued, to be at length completed by Crœsus under whom the Lydian kingdom came to its height and its end. Miletus alone held out, though again and again her territories on the mainland were harried and the war was carried up to her very walls. Her successful resistance won for her at last a treaty of peace and a recognition of her independence from Alyattes, which were respected by Crœsus in his final conquest of the other cities of the coast.

Meantime Miletus, whilst preserving her independence on land prospered exceedingly by sea. A goodly share of the carrying trade between all known peoples was in her hands. Caravans freighted with the riches of the East wound down to her gates from the Asiatic "hinterland." Her ships sailed into her ample and sheltered harbor from the ends of the Mediterranean world. Through her busy port passed in ceaseless traffic the wealth of Egypt and the West, of the wild Euxine shores and Lydia, of Ormuz, and perhaps of Ind. She had her trading posts away to the south of the mouths of the Nile; her colonies she had established in the far north on the Black Sea coasts, in the shadow of Cimmerian darkness.

So Miletus grew rich. In her markets much gold was exchanged for wares, and wares for much gold, and much remained in the coffers of her merchants and traders. She was secure, for her walls had proved impregnable to her foes, and the sea with its inexhaustible resources of trade lay always free and open before her. She was active and energetic, for not only her commercial interests but at first the taste, and then the threat, of the ever-present Lydian danger kept her continually on the alert. She was cosmopolitan, for along with the stream of foreign commerce there must have poured through her streets a refluent tide of the men, the tongues, the fashions, the customs, and the ideas of all nations. In a word, not only did she possess the leisure which Aristotle, as we have seen, considered to be a prerequisite of philosophy, but her circumstances were such as to keep her outlook broad and her intelligence keen, and to turn an

ease which might have become mere intellectual lethargy into time and interest for reflection and speculation.

So much for the place where European philosophy was born. A word in passing as to the times. The Sixth Century was an epoch of ferment, political and social, moral, religious, and intellectual. The ancient monarchies such as Homer describes had given way in the various cities to government by aristocracy and oligarchy, and this in its turn was being challenged, often for a time successfully, by the growing Greek aspiration towards democracy and popular government. The age was one of revolution and counter-revolution. The lower classes would rise and overthrow the oligarchic governments, drive out the old noble families, and confiscate their property. The exiled aristocracy in its turn would await some favorable opportunity for return to power, repossess itself of the city, and repeat the process of exile, execution, and confiscation. Meantime the continual turmoil bred, in the ranks of the democracy itself, a host of adventurers and demagogues and *nouveaux riches* along with a sprinkling of true patriots, who, in one way or another, worked themselves forward to popular leadership. Thus, ironically enough, a whole hierarchy of social distinctions arose below stairs. Sometimes the richer or abler of these "self-made men" would "arrive," and succeed, as the poet Theognis complains, in marrying themselves, their sons, or their daughters, into the old nobility. And again members of the nobility would sometimes for profit or from principle espouse the cause and make themselves the tribunes of the people.

Such a state of affairs was apt to breed an interest in reflection upon the problems of government and society and human life in general. It was also likely to result in the establishment of despotisms. A man of daring and ability, declaring himself the champion of one or the other party and possessing the confidence of the army and the gratitude of the victorious faction, would not find it hard to possess himself also of the supreme power. So it is that the latter part of the Seventh Century and the Sixth are preëminently the age of "tyrants" in Greece—of Cypselus and Periander at Corinth, of the Peisis-

tratidæ at Athens, and of Thrasybulus at Miletus, to mention a few of the more famous. But the Hellenic love of liberty made the maintenance of these despotisms difficult, especially in Greece proper. Even if a man succeeded in retaining and in dying peacefully upon the throne which he had built for himself, his son was liable to come to a violent end along with the tyranny he had inherited. In the Greek cities on the Asiatic coast the idea of a despotism seems to have been less repugnant, and the despotisms were longer-lived. This was due perhaps to the proximity of the Lydian Empire and to familiarity with the glories of its capital, Sardis, and with the wealth of Crœsus which did not breed contempt for kings.

Whatever one may think of tyranny as a political expedient, it helped stimulate one of the most brilliant epochs of Greek civilization. The tyrants took pride in their cities. They promoted the economic interests of their states and worked for their material prosperity and aggrandizement. They kept peace and order as no aristocratic or democratic administration could. Socially, too, they improved in some ways upon both democracy and aristocracy. They prized dignity and magnificence, and admired and cherished both the refinement which the common man despises because he is incapable of it, and the talent which he disparages because it is more than average. At the same time they welcomed to their courts, as no old nobility would have received within its ranks, the gifted, the distinguished, and the brilliant, from whatever source derived.

By energy and unscrupulousness, and at times by oppressive taxation the tyrants amassed great riches. But however ill-gotten, their wealth was as a rule well-spent. They lavished it, to be sure, on themselves, their favorites, and their courts. But they also poured it out upon their cities, to make them more stately and more splendid. They built public works and buildings and temples, the latter for the first time in enduring stone. Over across the Ægean the Ionic, in Hellas proper the Doric, style sprang into being. Corinthian builders by first using tiles for roofing made the pitched roof with its triangular pediment possible. Temple and monument invited adornment with

the statues of Gods and heroes, and the blank spaces of the newly fashioned pediments welcomed more ambitious groups of sculpture, in which the great events of myth and history could be set forth.

Sculpture and buildings require architects and sculptors. The courts of the tyrants, like those of their "cousins," the Italian despots of the Renaissance two thousand years later, became the rendezvous of artists. But it was not only the compass and the chisel whose ingenuity was stimulated and exercised. The pen as well was encouraged to discover new subjects and invent new styles. To the old Homeric hexameter were added fresh measures and meters adapted to fresh uses—the lyric with all its many forms and possibilities, and the dithyramb evolved at Corinth out of the songs in honor of Dionysus and destined to play so important a part in the formation of Greek tragedy. Alcæus fought and drank in fact and verse, and "burning Sappho loved and sang," at the brilliant and luxurious court of the Penthelids in Lesbos. Archilochus urged on the Spartans with his war songs. And Solon and Theognis, though no friends of tyranny, were shining revelations of the splendor of its age.

As we have said, poetry found new subjects as well as new forms. The poet no longer, as in the epic, watched and recorded from a hidden post of observation another's adventures. He held the mirror to the face of his own inner thoughts and feelings. He had a sudden vision of human experience with all its instincts, its passions, its emotions, its vicissitudes, its perplexities and problems, its windings and gropings towards the light of happiness and perfection. He saw its inexhaustible variety and richness as something to be delved into and exploited and refashioned by his hand into beautiful and ideal shapes, which should reveal to man the meaning of his yearnings and beckon him to their fulfilment. The poets were the thinkers and the teachers of the age, and for a long time reflection upon life and even, as we shall see, sometimes philosophical speculation regarding the nature of the Universe, found poetry as well as prose a natural vehicle of expression.

It was inevitable that this contact with new peoples and this

flaming up of self-questioning and self-expression should fire also the scientific interest. From Phœnicia and Babylonia and Egypt, traders and travelers brought back novel ideas about measuring the courses of the stars and the surface of the earth, which acquainted the Greek spirit of investigation with astronomy, geometry, and mathematics, of a developed and scientific type. The reports of strange adventures and of sights and places far away inland or over the seas were mapped and ordered into geography. And observation of the teeming animal life by sea and land and air crystallized into an ordered biological curiosity.

Nor could Greek religion escape the general effervescence of such an age. The Sixth Century, as we saw in the last chapter, was the epoch of the rise and spread of the mystical flood of Orphism. It was also a period of disquiet and readjustment in the orthodox cult. The Homeric and Hesiodic Scriptures were weighed in the balance of new visions and ideals and were found wanting. The immorality, the caprice, the disunion of the Olympians were felt to be unworthy of divine natures. The Gods must be good. The misrepresentations of their behavior in the canonical myths must be passed over or explained away. Thus it is that at the end of the century we find the poet Stesichorus, the immediate forerunner of the great tragedians, "bowdlerizing" the canon and rewriting the Homeric and Hesiodic theology in a form more palatable to a nicer moral taste.

But the development of the idea of the divine righteousness and goodness had to encounter difficulties of its own making. The world-old problem of the existence of evil and the divorce of reward from merit was raised in an acute form. The reflective poetry of the age abounds in pessimistic thoughts upon the vanity and misery of human life, the futility of virtue, the prosperity of the wicked, and the sufferings of the just. Such reflection naturally bred doubts as to the moral government of the world and the goodness of the Gods who permitted so much misery and countenanced such injustice. Of the two great Gnomic poets, Solon contented his religious sense with asserting that the happiness of the wicked is but seeming and passing,

and with the doctrine, so familiar to us in the Old Testament, that the divine justice is satisfied by visiting the sins of the fathers on the children. But Theognis, who was a bitterer and more rebellious spirit, would have none of this explanation. He confronted great Zeus himself with the spectacle of the misfortunes of the righteous, asked him how any one beholding so sorry a sight could reverence the Gods, and boldly challenged the Father of Gods and men to justify his ways to men.

Faith, however, then as so many times since in the same ordeal, emerged from the test triumphant. The immediate outcome of these questionings was not skepticism but a purer religion. Theognis, himself, still believed in the righteousness of Zeus. The way was prepared both for the grandeur of Æschylus' vision of the eternal and unescapable Justice of God hounding the wicked to their doom, and turning even sin to a moral purpose, and for the Olympian serenity of Sophocles' confidence that all things are ordered by a divine Providence and happen for the best. The Gods were purified of the dross of natural forces and primitive instincts and refined into golden ideals embodying the ease, the happiness, the deathlessness of that perfected human life in a frictionless world, of which man dreams. Their very images turned from fetishes and symbols to statues alive with every grace and beauty of the human form. Their rude shrines gave way to temples, and their cults, increasingly controlled by the State, developed into stately and splendid ceremonials, constructed and enriched by all the genius of the architect and poet.[1]

In a word, we have in the Sixth Century B. C. in Greece a period which reminds us not a little of the Italian Renaissance. There were the same city-states ruled by the same despots, who, springing from like origins and availing themselves of like opportunities, had grasped their power by similar methods. And once in power these despots, like the Italians, proved themselves "culture-mad" rulers, endowed with a universal sensitiveness to life in all its many phases, loving beauty, encouraging art and science, and vying with one another in gathering at their brilliant courts the most gifted men of the age.

[1] *Cf.* Fairbanks, *Greek Religion,* pp. 237, 238.

Similar causes provoke similar results. At both epochs man was awakening to himself—to the possibilities of his body, his senses, his mind. The world, ever widening through trade and adventure, poured in upon him unaccustomed and startling impressions. His own nature suddenly hinted at resources, and incited to an exploitation, no less strange and delightful. It dawned upon him that he himself and his surroundings need not be accepted as they stood, but could be made to yield almost anything he wished. And at the same time his wants became articulate and his visions enlightening. He found that he could measure his mind with outer Nature, that he could understand and control her, making her the servant of his comfort and the slave of his desires. He discovered that he could invent new gratifications for his senses and new delights for his heart and mind. He knew himself to be, within limits, master of his fate. Life and the world lay before him like an uncut block of stone, calling him to test, unaided but confident, his own untried power, if perhaps he might turn them by his own cunning and forethought into a work of art more wonderful and more revealing than any temple or statue built by hands. The mutability of human affairs, to be sure, must forever thwart him. The shadow of mortality lay heavy upon him. The consummate ease of the deathless and ever-happy Gods was beyond his grasp. Still, if he willed and strove, it was in his power even within the short space which intervened between birth and death to make earth almost Olympus and himself a creature almost divine.

In Italy this awakening of man's insight into the possibilities of himself and of his world, and this arousing of his ambition to fulfil them, meant the recovery of the Greek spirit by a race fitted to be its heir. In the Sixth Century in Hellas it meant the Greek's discovery of his own supreme genius.

Thales, the first Greek philosopher, was born in the early part of this extraordinary epoch. His life spanned the greater part of a brilliant century, and all but outlasted the most splendid period of Milesian history. He was still alive just prior to the fall of Sardis and the collapse of the Lydian Kingdom before the onslaught of the Persians in 546 or 541 B. C.

Many stories are told of him, most of them apocryphal, which testify to that universality of interest and genius which was so characteristic of the age. He is said to have cornered the olive market, and effected a monopoly in olive-oil—for those days a feat of high finance. Again he appears as the prototype of "Johnny Head-in-Air" in the "Slovenly Peter" of our childhood, so given to star-gazing as to fall unwittingly into a well, even though it lay immediately beneath his nose. He is also reported to have accompanied Crœsus on the disastrous campaign against the Persians, and by his engineering skill to have diverted the river Halys from its course. More credible tradition has it that he introduced geometry to the Hellenic world, and that he predicted an eclipse of the sun which took place in 585 B. C. However that may be, he was certainly interested in mathematics and astronomy. In the world of politics he had the foresight to oppose the selfish, and in the end fatal, foreign policy of his city, which was to disentangle and isolate its interests from those of the other Ionian cities, to find the cause and objects of their struggle against a common danger of no concern to itself, and to let Lydia and later Persia take the hindermost one by one, till Miletus turned out to be the one in question. Thales, however, advocated not merely a Pan-Ionian Confederacy, but an actual Union in which each city should sacrifice its independence to a central federal government with a new capital, not at Miletus. This he perhaps thought better than the inevitable surrender of liberty to a foreign conqueror.

To these keen and varied interests Thales added the prying curiosity about the Universe in general, the flair for generalization, and the bold imagination which make him the starting point for European philosophy. The idea of the unity of the world, to be sure, had already dawned on the Greeks. They had long suspected that all things, in spite of their immense variety and confusion, might after all be only sides or aspects or derivatives of One Thing which underlay and expressed itself in them all. The old cosmogonies of the poets and theologians had pictured the evolution of the Universe from a single source like Night or Chaos. Again, at the center of the primitive

worship of the fertility of nature, which antedated the orthodox theology and lay at the root of the Orphic Mysteries, there lurked the feeling that all beings emerged from and expired into the same inexhaustible reservoir of Existence. Some writers, indeed, trace this suspicion that the whole Universe is made throughout of the same single stuff far back to a primitive tribal and social consciousness, more fundamental and more ancient than man's sense of the separate existence of individual persons and things.

But this idea of a single Substance underlying all things had heretofore never been reasoned out, nor had there been any attempt to argue a description of its nature based upon a methodical observation of phenomena. In a word, it had never been studied. Thales' claim to be the father of European philosophy lies just in the fact that he was the first to transfer the World-Stuff from the realm of poetry and mystical feeling and vague conjecture, and to make its existence and nature the subject of a "scientific" investigation and hypothesis. He seems to have looked the world over from head to foot, to have reflected upon what he saw, and in the light of his observations and reflections to have asked himself and answered to his own satisfaction, what this Substance was of which all things were made.

The solution to his problem he found in Water. Water was the World-Stuff to which all the variety and complexity of phenomena could be reduced. The clouds and heavenly bodies he imagined apparently as overhanging, and the earth as a flat disc floating upon, an ocean whose contents sustained, exhaled, and composed them. Even so we might picture to ourselves an ice-floe overhung with luminous mist and lying on the waters of which ice and vapor alike are made.

Thales may have been influenced in his conclusion by the old belief that all things originally sprang from Ocean, but he had also sound philosophic reasons for it. He had observed, so Aristotle and the later commentators tell us, that the seed of all animals is wet, that even all vegetable life requires moisture, and that the very fire of the sun and stars appears to draw water from the sea. Probably, too, he had in mind the fact to

which we have just referred, that water assumes beneath our eyes gaseous and solid forms so unlike its real liquid self that we should not guess their origin without experience of the transformation. After witnessing daily so radical and astonishing a change, it need not strain the philosopher's credulity or stretch his imagination to suppose a further alteration of water into the manifold and diverse kinds of solid bodies and all the various degrees of vapor from the thick storm clouds verging on liquid rain, or solid hail and snow, to the thin bright blue of the sky, or even the collected and focused luminousness of the sun and moon and stars.

How far Thales elaborated his theory, it is impossible to say with any certainty. Aristotle mentions a tradition which represents him as saying that all things are full of Gods, and that the loadstone has a soul because it moves iron. Later commentators drew from this the unwarranted inference that he believed in a divine mind permeating, animating, and controlling all things. This conclusion is undoubtedly quite false, but it seems reasonable to suppose that Thales regarded his World-Substance not as something in itself inert and in need of an outside force to move and direct it, but as something in which movement and life and development were always and naturally inherent. Or better still, we might say that just as Greek religion did not for a long time distinguish things from persons or the animate from the inanimate, so Greek philosophy did not at first discriminate between the ideas of matter and motion and force and life and consciousness, but left them all fused together in the as yet unanalyzed notion of the Something of which the world was made.

Anaximander, a pupil of Thales, was born about 610 B. C. He lived to see the fall of Sardis and the destruction of the Lydian Empire. Indeed, the publication of his book on philosophy, perhaps the first Greek work in prose, is said to have taken place in the same memorable year—546 B. C. Only fragments of this book have come down to us, but it was extant in the time of Aristotle. The exact date of his death is unknown.

Anaximander seems to have shared the universality of his

age and of his master. He evinced a profound and scientific interest in astronomy, geography, and biology, and drew the maps—the first in existence in the Western world—to illustrate the descriptions of his fellow-townsman, the geographer Hecatæus.

With the philosophical conclusions of his teacher the pupil was unable to agree. He asked the same simple and comprehensive question, and answered it also in a single word. But the word was different. Apparently he found water too specific, too wedded to its own nature and ways, in a word, too essentially watery, to be transformed without protest in fact and imagination into all the myriad things which water to all intents and purposes, save those of theory, so palpably is not. The Stuff of which all things are made must be something more versatile, more adaptable, more capable of throwing itself wholeheartedly and with utter self-effacement into its innumerable and absolutely different rôles and parts. Indeed, that one specific kind of thing should be the substance of which all other sorts of things are composed might well seem unreasonable. Only something which was no one thing in particular could turn itself with equal facility into anything and everything. And perhaps, too, he was struck with the way in which the confusion of things may be sorted out into pairs of opposites, and thought that Thales gave undue prominence to the wet and unduly disparaged the importance of the dry.[2]

However that may be, Anaximander refused to specify the nature of the World-Substance. It was simply something to which no particular character or limitations of any sort could be assigned. It was the Boundless, the Indeterminate. Being undefined and unbounded, it could be imagined without difficulty as assuming any shape whatsoever. Out of it all things arose and into it all things were resolved again without any alteration of its essential character.

In addition to the question, "What is the world made of?" Anaximander asks and attempts to answer a second question, "What is the process like by which the world is formed?"

[2] Burnet, *Early Greek Philosophy*, 3rd ed., p. 54.

This problem he tries to solve somewhat as follows: There is an eternal motion in the Boundless, in the course of which pairs of opposites like hot and cold, wet and dry, light and darkness, become separated out from the indefinite substance. These opposites conflict with and suppress one another and are thus continually resolved again into the undifferentiated World-Substance. This happens, we are told, in a somewhat perplexing phrase, "as is ordained, for they give satisfaction and reparation to one another for their injustice according to the ordering of time." [3]

What does this passage mean? Is it, as the compiler who quotes it suggests, simply a poetic way of speaking? It may well be that Anaximander is merely remarking rather figuratively that as any one thing by monopolizing a certain amount of space and material keeps some other thing from existing, it only seems turn about and fair play for it eventually to step out and make room for something else in the crowded world. Or he may have the balance of opposites in mind, and the disturbance to the order and equilibrium of the Universe which would result if one member of a pair permanently triumphed over and suppressed its adversary. Again, he is not perhaps from his own point of view speaking figuratively and poetically at all. It may be that we are simply dealing with a philosophical example of that tendency, noted in the last chapter, to leave physical and moral law indistinguishable from one another, and to regard the behavior of things as controlled by the same considerations of propriety and equity as regulate the conduct of men.

Anaximander seems to have continued his description of the way in which the world arose, with considerable astronomical, geological, and biological detail. He believed apparently in the existence of other worlds besides our own. But whether he conceived the process of separation into opposites as occurring throughout the Indeterminate and Boundless Substance and thus giving rise simultaneously to an indefinite number of cosmic systems, or believed rather in an infinite succession

[3] Diels, *Vorsokratiker*, I. p. 15 (trans. Burnet).

of such systems, one after another, is a debatable point.[4] These worlds he also spoke of as Gods.

The manner in which a world-system was evolved he conceived as follows: The original opposition of the hot and the dry to the cold and the moist became, when once they were separated out, a ring of fire surrounding a core of cold and wet. In the course of the interaction between these two, earth, water, and air or vapor were differentiated within the core, while the enclosing fire became broken into three revolving hoops or rings, solar, lunar, and stellar. These rings were veneered with air or mist except at holes through which the fire shone out. The hole in the first is the sun, in the second the moon. The many perforations of the third are the stars. The earth itself is a cylinder on the top of which we live.

Anaximander's account of the origin of man is even more interesting. "Living creatures," he tells us, "arose from the moist element as it was evaporated by the sun[5] . . . each enclosed in a prickly bark. As they advanced in age, they came out upon the drier part. When the bark broke off, they survived for a short time."[6] Man himself "was born from animals of another species,"[7] and was "like a fish, in the beginning."[8] For had he been subject in the old days to his present disadvantages of a prolonged infancy and of inability immediately to forage for himself, he could never have survived primeval conditions.

It seems astonishing to find at the very outset of Greek thought a theory anticipating some of the most important conclusions and arguments of the modern doctrine of evolution, but it should be remembered that the idea of the development of all things out of less highly organized beginnings was, as we have pointed out, natural to the Greek mind, and that the notion of the fixity of species was a later development in ancient philosophy. And as for the doctrine of the special

[4] The latter view is Zeller's, the former Mr. Burnet's.

[5] Hipp. *Ref.* 1, 7 (trans. Burnet, *Early Greek Philosophy,* 3rd ed., p. 73).

[6] Aet. v. 19, 4 (trans. Burnet, *loc. cit.*).

[7] Ps.-Plut. *Strom.* fr. 2 (trans. Burnet, *loc. cit.*).

[8] Hipp. *Ref.* 1, 6 (trans. Burnet, *loc. cit.*)

creation by fiat of the different kinds of animals, we remarked in the last chapter that it was quite foreign to Hellenic ways of thinking.

The third and last of the Milesian School was Anaximenes, a pupil of Anaximander's. Concerning his life we know almost nothing, save that he was younger than Anaximander and that his work and teaching must have been accomplished prior to the year 494 B. C. In that year the independence and importance of Miletus came to an end. Her rulers, not content with freedom from the Persian yoke, dreamed of new colonies and conquests. The tyrant Aristagoras had enlisted Persian aid in a scheme for the joint conquest of the islands of the southern Ægean. A quarrel broke out, the Persian commander played him false, and the plan fell through. Aristagoras, finding himself and his city discredited and suspected in the eyes of the Great King, made a desperate bid for self-preservation. He stirred up a general revolt of the Ionian cities, and enlisted the aid of Athens and of Eretria, a city on the island of Eubœa. At first things went well for the Greeks, and Sardis, the old Lydian capital, was taken. But the tide soon turned. The Greeks were defeated, and the Athenians returned home, having sown the wind which they were so soon to reap in the whirlwind of the two Persian invasions of Attica and the sack of Athens. The siege of Miletus, already begun, was now reinforced by a blockade by sea. Finally the city was taken by storm. Her philosophic preëminence was gone, along with the rest of her strength and splendor. Though the teachings of the School still continued to inspire and influence philosophic speculation in Ionia, the succession of great thinkers was at an end.

The writings of Anaximenes, however, survived the catastrophe and were known in later times. Only one direct quotation, however, has come down to us. But we can reconstruct his teachings, as in the case of Thales and Anaximander, from the reports of commentators. Like both his predecessors he asked what the Stuff was of which all things are composed, and like Anaximander he sought to discover by what sort of a process this Substance turns into all the variety of things

which go to make up the sensible, work-a-day world. He agreed, however, in his conclusions with neither Thales nor Anaximander. The World-Stuff, he thought, was Vapor or Air, the same stuff which we breathe in its invisible form and see quivering and shimmering, or thickening into mist, under the influence of heat and cold. Indeed, it seems as if this conclusion were suggested to him by his remarking the dependence of men and animals upon inbreathed air, just as Thales was led to adopt his theory by noticing the necessity and presence of moisture in all living things. Again, vapor could be detected in the act of becoming liquid as easily as water could be seen turning into mist, while in the dance and shimmer of rising heat it could be observed apparently transforming itself into light and fire. This Air or Vapor, though conceived as possessing a definite nature, was considered by Anaximenes to be boundless in extent like the Boundless of Anaximander. And like the Boundless it was naturally and always in motion. He called it also a God.

The process by which our world arose from the original World-Stuff was, Anaximenes believed, one of condensation and rarefaction. When Air "is dilated so as to be rarer, it becomes fire; while winds, on the other hand, are condensed Air. Cloud is formed from Air by 'felting'" (that is, by compression); "and this, still further condensed becomes water. Water, condensed still more, turns to earth; and when condensed as much as it can be, to stones." [9]

The result of this process of compression is a slab of solid material, which is our earth with all its different substances. This slab is very broad and is upheld by the air underneath it. The moisture rising from it produces the heavenly bodies "which are of a fiery nature," and "are supported by the air because of their breadth." [10] The sun and moon and the planets are discs of fire floating free; "the stars are fixed like nails in the crystalline vault of the heavens." [11] The orbits of

[9] Hipp. *Ref.* 1, 7 (trans. Burnet, *Early Greek Philosophy,* 3rd ed., p. 73.).
[10] Hipp. *Ref.* 1, 7 (trans. Burnet, *Early Greek Philosophy,* 3rd ed., pp. 75-76).
[11] Aet. 11, 14, 3 (trans. Burnet, *op. cit.,* p. 76).

the heavenly bodies do not carry them under the earth, as Anaximander supposed, "but round it, as a cap turns round our head. The sun is hidden from sight, not because it goes under the earth, but because it is concealed by the higher parts of the earth, and because its distance from us becomes greater."[12] The risings and settings of the moon and the other planets, and the various constellations were doubtless to be explained in the same way. The cosmic system thus evolved floats in the infinite Air from which it breathes in and draws its life and cohesion and organization, just as we are held together as organic beings by the air which, inhaled by us, becomes our soul and vital principle.

We need not follow Anaximenes into further astronomical and meteorological detail, and we may note in passing the apparent lack in his case of the biological speculation regarding the origin of animals and man which makes the system of Anaximander so interesting.

To us in retrospect it looks as if Anaximenes were trying with his theory of Air as the World-Substance to strike a compromise between the opinions of Thales and Anaximander. If Water seemed too specific and too set in its ways to turn itself easily into the great variety of objects which go to make up the world, the Boundless might well appear to be too vague, too vacant, too lacking in stuff and character, to be the substance of anything at all. Nothing in particular is not promising material for every sort of particular thing. The imagination, forced to leave it blank without definition or determination in the first place, finds difficulty in following and picturing its growth from mere blankness into the crowded and diversified and highly colored spectacle which existence presents. Anaximenes, however, might claim with some show of reason to have found a happy mean combining the good and discarding the bad points in the theories of his predecessors. Air was as infinite, as all-pervading, as pliable and supple and capable of all sorts of far-fetched contortions and transformations, as the Boundless. It had none of the heaviness, and stiffness, and solidity, which made it difficult to

[12] Hipp. *Ref.* 1, 7 (trans. Burnet, *op. cit.*, p. 76).

imagine Water in the act of assuming all kinds of shapes unlike its own and becoming all kinds of things different from itself. At the same time, unlike the Boundless, but like Water, it had a definite character which enabled one to get a grip on it. One could say what it was like, breathe it, feel it, often see it, and test by the senses its airy, mobile, and essentially changeable nature. Here, then, was something which was something in particular and could be named and described, and yet was capable, as it seemed to sense and imagination, of turning quickly and easily, without resistance or friction, into other things.

Anaximenes' theory regarding the process by which the One Substance gives rise to the variety and complexity on the surface of the world is also more definite than the statements of Anaximander. The latter had contented himself by saying vaguely that a separation and conflict of opposing qualities went on within the Indeterminate, but he did not tell us how either the separation or the conflict takes place. Anaximenes, on the other hand, points to an ordinary, everyday occurrence like condensation and rarefaction with which we are all familiar and tells us that this is what the whole World-Process is really like. We thus get a clear image of what goes on and are able to follow it in imagination when it is not apparent to perception.

Moreover, Anaximenes came very near to enunciating a cardinal principle of modern science. The success of science in helping us see through and understand the world is due to its reduction of all the differences and alterations of quality and nature in things to a mere difference and shifting of the place and spatial relations of similar and unchanging particles like atoms or ether vortices. And Anaximenes was on the verge of discovering this principle when he found that the diverse properties and characters of objects were nothing but different degrees of dilation or compression of one simple thing which had a single unalterable character and constant and unchangeable properties. But as it turned out it took another century of analysis and reflection to bring the scientific view to clear

and final expression in the philosophy of Leucippus and Democritus.

The astronomical speculations of Anaximenes, however, are not so much in line with later discovery as those of Anaximander. If Anaximander did not reach the point of declaring the earth a sphere, he at least took into account its possible thickness and made it cylindrical in shape, whereas Anaximenes never got beyond the popular belief that it was flat or displayed any interest in its shape so far as its depth was concerned. Similarly his theory that the sun and the moon and the planets were flat, leaf-like discs which circled round the earth horizontally, lacked the possibilities and suggestiveness of Anaximander's vision of hoops revolving in a more or less vertical plane about the earth and hiding beneath it, by night or day, the fiery orifices which are the heavenly bodies. Still, Anaximenes made a distinction, which Anaximander failed to grasp, between the planets and the heaven of fixed stars.

It is interesting thus to find European philosophy at its inception occupied with profound and central problems. To ask what the World is really like at heart, to seek what the Nature of Things really is, is for philosophy the commandment on which hangs all the law and the prophets. And the second is like unto it—to show by what process the everyday, phenomenal world issues from the World-Principle or Substance; or, in other words, why and how Reality manifests itself as it does and wears this particular familiar external expression and clothing rather than some other. Indeed, the second commandment has sometimes proved for philosophers, as for Christians, more difficult of observance than the first. It is much easier to extract a theory from facts than to reëxtract the facts from the theory. When we have reached the Principle which seems to account for our particular universe, we are frequently at a loss to see why it should not just as well develop into any one of many other sorts of worlds. The nature of Reality, whatever else it may be like, has something of the fly-trap about it. Many a thinker who has buzzed his way in complacently enough and settled, with convinced proboscis and wings folded in attainment, upon the Ultimate

Truth regarding the Real Constitution of Things, has exhibited less assurance and success when it came time to crawl painstakingly out again to the same data from which he started.

These two questions, then, What is the real Nature of Things? and, How does this Nature manage to become the things themselves and appear to us the world it does? which are the Alpha and Omega of philosophy, are explicitly raised by the Milesian School. And they are answered with a clearness, an understanding of the problem, and a power of generalization quite equal to our own. To us, to be sure, from our vantage point at the summit of nearly twenty-five centuries of further analysis and meditation, it may seem at first thought rather odd and primitive ever to have supposed that the Universe could be reduced to Water or Air or the Boundless and reëxtracted therefrom by a simple process of separation into opposites or of rarefaction and condensation. But a moment's reflection will convince us that in relation to the data upon which they were founded, these guesses were quite as reasonable as our own. We have not learned to think any more to the point or more profoundly. We have collected more data and sorted them out more carefully. We have invented more adequate means of cataloguing them. And we have made new attempts to organize them and to arrive at some comprehensive hypothesis regarding them, in the light of our more detailed analysis of the situation. But that is all.

We should remember also that we ourselves have not reached the summit of all thinking. If the centuries slope away behind and below us, they also stretch above us towards unknown peaks. The process of investigation, of collecting and sorting out and cataloguing, and of framing new hypotheses to fit new analyses and associations of data, has not come to an end. Twenty-five hundred years hence our present scientific and philosophic systems will doubtless seem as immature and unsophisticated as the speculations of the Milesians appear to us to-day. The recently propounded Einstein theory, for example, shows how complete a revolution may take place at any moment in our views regarding the nature of the physical

world. The philosophers of that distant future may perhaps find it quite odd and primitive, too, that we could ever have believed that the Universe was a Mechanism, or that it was governed by a moral Purpose. To them ether vortices, ions and electrons, or mind-stuff or souls or selves may seem as lacking in subtlety as Water does to us. And even the theory which has been so much in vogue that the world can be reduced to a flow of ideas in an Infinite Mind, or regarded as the Career and Experience of an Absolute Consciousness, may look to their eyes, for all we know to the contrary, like airy vaporing. It is better for us not to judge the past lest we, too, be judged by the future.

Various designations have been applied to the Milesian philosophers, and for that matter to the early Greek thinkers in general. They have been called "physicists," because they appeared to later critics to be describing Reality in purely physical or material terms. Again, they are sometimes referred to as "monists," because they regarded the world with all its different phenomena as reducible to a single, simple principle like Water or Air. And they are also termed "hylozoists" on account of their belief that the World-Stuff was of itself alive and in motion. There is no objection to these characterizations so long as we keep it in mind that they represent, not the earlier philosophers' opinions about themselves, but the judgment passed on them by their later critics and historians in the light of considerable development in the interim of analysis and speculation. To call the Milesian School "physicists" in our use of the word, for example, presupposes, if not an evolution of physics as a separate science which in their time had not yet taken place, at least a distinction of the notion of matter from that of form and law and life and soul, which it would never have occurred to them to make. In its earlier Greek sense, to be sure, they might have accepted the term, but then in its original meaning "physics" meant interest in the Nature of Things in general or philosophy. But, as we understand it, the designation would have had no significance for those to whom it was applied. In their own estimation they were not "physicists" but philosophers. Their prob-

lem was not what the physical side, as differentiated from the other aspects, of the Universe was like, but what the Universe as a whole, what Reality was like. When they spoke of Water, or the Indeterminate, or Air, they believed themselves to be describing not the nature of Matter as such, but the essence of the whole conglomerate mass—twisting and writhing, teeming with all sorts of forms, crawling with life, bubbling and bursting into passion and emotion and thought in human careers and history—which we call Existence.

Similarly to call them "hylozoists" is equally misleading. We apply it out of the knowledge that later on the concepts of Life and Consciousness and Matter were extricated from that of the World-Whole and divorced from one another, and that Matter came eventually in many systems to be regarded as in itself quite inert and dead. To many of us, indeed, it seems quite naïve and surprising that Matter ever should have been thought of as alive. But the Milesians would never have suspected that it could be regarded otherwise, supposing even that they had ever laid any special stress upon the solid and spatial aspects of the world and thus even approached the notion of Matter as such. In order to make the term "hylozoism" comprehensible and acceptable to them as a description of their views, we should have had to acquaint them with the future course which speculation was to take. The term "monist" is even more deceptive. It is a modern invention suggested by much sad experience of "dualistic" and "pluralistic" people who do not believe that the Universe is all of one piece and cut from the same cloth, but feel that it is a patchwork or even crazy quilt of at least two and very likely more eternally independent and irreducible principles. It contrasts the Milesian School with more recent theories, and is not a term which, without having studied the history of subsequent philosophy, the School could have applied to themselves. It is much safer then, it seems to me, to avoid such tags and to stick to the simple geographical designation which the Milesians themselves would have recognized.

The philosophic preëminence of Miletus came to an end, as we have seen, with the fall of the city into the hands of the

Persians. But Anaximenes and Anaximander had left pupils who kept the traditions and doctrines of the School alive. We shall later have occasion to note a reappearance of the Milesian teaching in a form modified by the new developments in philosophy to which we are about to turn. The revival, however, will prove a side-issue of little importance. The main currents of thought were destined to run in fresh channels through new lands.

But the Ionian cities had still to contribute two great thinkers, Xenophanes and Heracleitus, to the history of philosophy before its center of gravity shifted, first to the Greek settlements in Italy and Sicily, and then to Athens. The former, we may take up at once, as his exile at the age of twenty-five from his native city of Colophon, near Ephesus, and his emigration to Sicily symbolize the transplantation of philosophy from Ionia to Magna Grecia. He seems to have spent much of his life on the island, and was at the Court of Hiero, tyrant of Syracuse, whose reign lasted from 478 to 467 B. C. He lived to be over ninety-two years old. More exact dates in connection with his life and death it is impossible to establish.

There was considerable reaction at the end of the Sixth Century against the over-civilization and luxury of the age, and it has been suggested that Xenophanes is best understood in the light of this movement. It is certain that he had the spirit of a reformer. In the fragments preserved to us of the poem in which he gave vent to his philosophical and other opinions we find a sharp and very modern attack on the cult of the athletic hero and the sporting type to the neglect of brains and solid worth. And he inveighs against over-dressing and perfuming, and warns his readers against getting so drunk at dinner-parties that they are unable to get home alone, or allowing their conversation to degenerate into empty babble about the "battles of Titans or Giants and Centaurs."

But his chief claim to fame lies in his bold and unqualified attack upon the orthodox religious views of his day. It has the point, though it lacks the brevity and wit, of Voltaire's remark that if God created man in his own image man had returned the compliment.

"Homer and Hesiod," he tells us, "have ascribed to the gods all things that are a shame and a disgrace among mortals, stealings and adulteries and deceivings of one another. . . .

"But mortals deem that the gods are begotten as they are, and have clothes like theirs, and voice and form.

"Yes, and if oxen or lions had hands and could paint with their hands, and produce works of art as men do, horses would paint the forms of the gods like horses, and oxen like oxen, and make their bodies in the image of their several kinds.

"The Ethiopians make their gods black and snub-nosed; the Thracians say theirs have blue eyes and red hair."

The truth, so far as the truth in such matters can be ascertained, is that there is

"One god, the greatest among gods and men, neither in form like unto mortals nor in thought.

"He sees all over, thinks all over, and hears all over.

"But without toil he swayeth all things by the thought of his mind.

"And he abideth ever in the selfsame place, moving not at all; nor doth it befit him to go about now hither now thither." [13]

Until recently these verses were believed to indicate a belief in one God, as we to-day understand such a belief, and Xenophanes has been hailed by many modern historians of philosophy as the harbinger of a dawning monotheism. But this view is now generally discredited. Xenophanes more probably thought of his "one god the greatest among gods and men," abiding "ever in the same place, moving not at all" as merely the World-All, the Universe. He meant by it no more, nay even less, than did the Milesians by their World-Substance. For the Milesians reduced the variety of the world to manifestations of one principle, whereas Xenophanes, as we shall see in a moment, thought that there were two ultimate constituents, earth and water, of which all things were composed.

Incidentally it is also well to remember in connection with his application of the term "god" to the World-All, that Anaximenes, too, had said that the World-Substance was divine. And Anaximander had applied the term to the world-

[13] Trans. Burnet, *Early Greek Philosophy*, 3rd ed., pp. 119-120.

systems which he conceived to be differentiated out of the Boundless, while Thales, we may recollect, had said that "all things were full of gods."

So far then, Xenophanes seems to have made no advance over the speculations of his predecessors. The same is true when we consider such lines as "God sees all over, and hears all over," and "without toil he swayeth all things by the thought of his mind." Here, too, there is no reason to suppose that he had in mind anything very different from the view of the Milesian School. The world for him, as the World-Substance for them, was inherently full of motion and pregnant with life and consciousness, and was capable of evolving by its own innate powers into an everyday world of definite things and orderly processes, organic beings and reasoning minds. He is testifying not to a precocious monotheism, but is one more witness to that absence as yet in the Greek mind of any distinction of the ideas of matter and motion and life and consciousness from one another.

We have very little evidence as to how Xenophanes supposed different things to come into being within the World-All. He tells us that "we all are born of earth and water," that "all things are earth and water that come into being and grow," and furthermore that "the mighty sea is father of clouds and of winds and of rivers." He was interested, too, like Anaximander, in the depth of the earth and said that "below it reaches down without a limit." [14] Compared with the speculations of Anaximander and Anaximenes, these opinions seem superficial and perfunctory.

Indeed, it might be maintained that the really surprising and interesting thing about Xenophanes is not contained in his positive teaching at all. It lies rather in the boldness of his critical and destructive work, and in the fact that as early as the last part of the Sixth Century the established religious beliefs of the day could be with impunity so bluntly attacked and rejected. The moral sense, as we have already seen, was already aroused to the incompatibility of the theology of Homer and Hesiod with the newer vision of the ideal, and lib-

[14] Trans. Burnet, *Early Greek Philosophy*, 3rd ed., p. 120.

eral and free thinking, as well as reforming, tendencies were obviously abroad. Preparation was not only afoot both for a purified theology like that of the poet Æschylus, but also for a religious skepticism such as we shall find when we come to the teachings of the philosopher Protagoras.

Furthermore, there are in Xenophanes very interesting foreshadowings not only of religious agnosticism, but of the later philosophic skepticism. He quite frankly suspected the validity not only of the speculations of other philosophers, but even of his own theories. He recognized the obscurity and difficulty of the problem, and he felt that the answers he suggested were as tentative, and needed to be taken with as many grains of salt, as the solutions proposed by any one else. Philosophic "systems" in general were matters of conjecture rather than conviction, and his was simply one guess among others.

"Let these," he says, apparently referring to his own views, "be taken as fancies something like the truth. There never was nor will be a man who has a certain knowledge about the gods and about all the things I speak of. Even if he should chance to say the complete truth, yet he himself knows not that it is so. But all may have their fancy." [14a]

Taken all in all, then, Xenophanes in spite of his edifying start comes to rather a dubious end. If we were to try to label him with modern tags, we might say that he was a vaguely pantheistic sort of person with a strong tinge of agnosticism.

There is one more fragment of Xenophanes which may serve as a close to the present, and an introduction to the next chapter. "Now, however," it runs, "I come to another topic, and I will show the way. They say that once on a time when a hound was badly treated, a passer-by pitied him, and said, 'Stop beating him for it is the soul of a dear friend; I recognized him on hearing his voice.'" [15] This passage shows a familiarity with the belief in the Transmigration of Souls, which, as we have seen, was one of the central tenets of the

[14a] Frs. 35, 34 (trans. Burnet, *Early Greek Philosophers,* 3rd ed., p. 121).
[15] Frs. 18 (trans. Fairbanks, *First Philosophers of Greece,* p. 70).

Orphics. It has been suggested that it is a deliberate hit at the philosopher Pythagoras, a contemporary of Xenophanes, who made much of the doctrine in his teachings. Let us then follow the way pointed out by Xenophanes and pass to another topic—the philosophy of the Pythagoreans.

## CHAPTER IV

## PYTHAGORAS AND THE PYTHAGOREANS

THERE is no figure in the history of philosophy so mysteriously shrouded in the phosphorescent mists of legend as the person of Pythagoras. Revered by his more immediate followers as a superior being, he acquired among later disciples the majesty of a demi-god. He was variously reputed to be the son of Apollo in his present existence, and to have been the child of Hermes in a prior incarnation.

Like the Bodhisattvas on the threshold of Nirvana and Buddhahood, he was said to possess through the grace of his parent, Hermes, the memory of all his past existences. As for his teachings, they were derived straight from his other father, Apollo, through the lips of the Delphic oracle. And it was reported that in the flesh he had descended into Hades. He was also credited with other scarcely less distant but more mundane journeyings which had acquainted him at first hand with all the lore of the Phœnicians, the Chaldeans, the Magi, the Hindoos, the Arabians, and the Egyptians.

It is highly improbable that, even in an age when supernatural fathers were plentiful and direct confabulation with the divine was frequent, a commonplace personality could have attracted to itself so many and so flattering legends. It is true that Pythagoras' own adherence to mystical beliefs and rites like those of the Orphics and the votaries of the Delian Apollo, made his exaltation by his followers almost a bit of routine. In them transmigration, the partial incarnation of the divine in human nature, and ecstatic union with the deity through mystical sacrament and ritual, were a matter of course. Still, the myth suggests that Pythagoras was a remarkable and distinguished man, and such historic fact as we can gather goes to bear out this assumption.

He was born at Samos, probably in the last half of the Sixth Century. His dislike of the rule of Polycrates, who became tyrant of Samos in 532 B. C., caused him to emigrate to southern Italy, where at Croton he gathered about him a company of disciples and formed them into a religious order. This Order soon became powerful and influential and, like many later religious foundations of which history readily reminds us, tried to take a hand in politics and interfere in the government of the state. The School became a target for political abuse and disorder, so much so that the Master himself had to leave Croton, and take refuge in the city of Metapontium, where he died. By the middle of the Fifth Century the political activities of the Pythagoreans had become so obnoxious that the opposition rose, burned their lodge or monastery, killed many of them, and drove out the rest. Thus the Order became diffused through Magna Græcia and Greece proper.

As we have said, the Pythagoreans were a religious community, drawing their inspiration and doctrine from the mystical side of Greek religion. Their interest centered in the purification and the redemption of the soul from the taint of the physical and the prison of the body, in her final release from the wheel of transmigration and rebirth, and her reunion with the Divine. To effect these ends the Pythagoreans offered the old mystical means of ceremonial purgations and abstinences, the avoidance of certain food and clothing, and the performance of certain ritual acts. Among them, as among the adherents of all religions, there were many doubtless who stopped with the dead letter of observance, but there were doubtless many also who reached the spirit which gave them a new and deeper life.

The exact source of the Pythagorean religious mysticism is somewhat in dispute. It has been argued that just as the Orphics reformed and purified the older cult of Dionysus out of which they sprang, so the Pythagorean Society might be regarded as essentially a reformed branch of Orphism, which sought to correct and supplement the tendency towards mere ritualism and formalism in the parent body by emphasizing the need of a real rule of life, not only in outward observances,

but in thought and meditation.[1] But it has also been suggested that the fountainhead of Pythagoras' religious beliefs lay not so much in Orphism as in the worship of the Delian Apollo, who had become, like Dionysus, the center of a "religion of redemption" with mystical rites of purification dating back it may be to Minoan Crete.[2]

However that may be, the Order, in addition to enjoying the practice of a formal ritual of purification, like the Orphics and the Apollonian worship, also divided the sheep from the goats on broader and more spiritual lines than that of mere church membership. They distinguished three types of men in general; the lovers of pleasure and gain, the lovers of practical activity, competition, worldly success, and honor, and, best of all, the lovers of contemplation and wisdom, who were devoted to the knowledge of the highest and deepest things of life. In fact, the term "philosophy" or "love of wisdom" is reported to have been first used by Pythagoras. And it was perhaps this third way of life, inspired and devoted to the philosophic interest, rather than any mere routine of ceremonial abstinences and participation in sacraments, which he regarded as religion pure and undefiled, making clean the heart within and preparing the spirit for mystical salvation and reunion with the Godhead. Such a view receives support from the fact that for Plato, as we shall soon see, who was much influenced by Pythagorean ideas, philosophy had precisely this high and solemn office.

But whether the interest in scientific and philosophical investigation and speculation had in the eyes of the Pythagorean this religious value and function, or was simply, like the modern Jesuit's occupation with similar interests, additional and subsidiary to a central and separate religious life and experience, the fact of that interest is undoubted. Like the most distinguished and learned of modern religious orders, the Pythagoreans, also, were preëminent in their application to

[1] Cornford, *From Religion to Philosophy*, p. 198.

[2] Burnet, *Greek Philosophy, Thales to Plato*, pp. 40-41, *Early Greek Philosophy*, 3rd ed., p. 90.

the problems of science—particularly of music, mathematics, medicine, and astronomy—and of philosophy.

The philosophy of the Pythagoreans is largely indebted to the Milesian School. Pythagoras is said to have been in his youth, before he left Samos, a pupil of Anaximander, and he was a contemporary of Anaximenes. Like Anaximander he believed that the substratum of all things was the Unlimited, but he seems to have characterized this Unlimited as Air, and like Anaximenes to have conceived the world as supported and animated by the inbreathing of this Air in the midst of which it floated.

Pythagorean science was also in part sprung from Milesian sources. The so-called "Pythagorean" proposition in geometry had already been debated in Miletus, and some of the astronomical ideas of the Order suggest the influence of Anaximander's theories.

The important and original contribution to philosophy comes, however, in connection with the Pythagorean answer to what we have called the Second Commandment of philosophy to show by what means and process all the richness and variety of the manifold and parti-colored world arises from the simple and undifferentiated World-Substance. Anaximander had suggested a process of separation of pairs of opposites, Anaximenes, one of condensation and rarefaction. The Pythagoreans hold in a way to Anaximander's notion of opposites, but these opposites are not conceived by them as eventually and secondarily produced within and by the Unlimited, like successive or even simultaneous births of dissimilar and quarrelsome twins. On the contrary, the opposition is a fundamental and eternal one, of one primary World-Principle with another. From all eternity, so to speak, the Unlimited finds itself confronted and conjoined with another Principle, that of Limit and Determination, which exists outside and beside it. It is only through the action of this Principle upon the Unlimited that the interminable vacancy and monotony of the latter can be broken up, and mapped, and plotted, and specified out into a world of separate, distinct, individual things, each fenced within the bounds of its particular and specific self. The

world, then, is the result of the interaction of these two factors. In a word, the Universe is a measuring out or off of the Unlimited by the Limited.

But this is very vague. It leaves two questions pressing for an answer. In the first place, is there any rule for determining how much of the Unlimited must be measured out in order to make definite objects? And secondly, how can different kinds of objects all be composed of one and the same indeterminate stuff? What is the difference, for instance, between a receipt for a cat and that for a dog?

An answer to the first question was suggested to the Pythagoreans by their studies in music and medicine. They knew when they played the lyre that musical notes were vibrations imparted to the air by the quivering strings; and they were also familiar by experiment with the fact that those intervals in the scale which struck their ears as melodious and concordant were always associated with invariable arithmetical proportions in the length of one string to another. Further scrutiny showed them that the four perfectly concordant notes of which the lyre was capable were in such proportion that the two middle notes stood in the relation, also, of arithmetical means to the two extremes. The means, then, might be regarded as mixtures, according to an invariable arithmetical formula, of the extremes.

This notion of the mean as a balanced and harmonious mixture of opposites was reinforced by the Pythagoreans' medical theories. The body was obviously a combination of opposite qualities of dry here, and moist there, of heat in one place, and coolness in another. When these qualities were harmoniously balanced, when there was a "happy" mean of hot and cold, etc., the body was healthy and perfect and in a state of well-being. If there was a disturbance of the balance and one opposite upset the proportion by excess or deficiency, then there was disease.

The application of these studies in music and medicine to the philosophical situation was obvious enough. It was but a short, easy step to say that all sound, solid, clear-cut things owe, like healthy bodies, their definite and articulate nature to

a harmony and balance of the factors which compose and sustain them. Every object was a correct and shapely mean between extremes of possible lopsidedness and deformity in one direction or another. The Universe, then, was the stable and well ordered, the neatly mapped and plotted and fenced affair it was, because to each of its component parts, to each cat, and dog, and tree, and blade of grass, "just enough" for that particular kind of thing, and not "too much" or "too little" had been allotted.

We should by this time be almost prepared for the answer which the Pythagoreans gave to the second question—the question which asks by what principle that balanced and happy "middle term" which means the lithe and purring cat, is differentiated from that golden mean which manifests itself in the faithful, barking watch-dog. The reply might almost rise to our lips unprompted. The measure of the one is different from the measure of the other. Each thing is a specific number, a specific amount, of the Indeterminate. Every kind of object has its own particular, mathematically expressible receipt or formula. The differences between things are then essentially differences in amount and number. In a word, the Limited, the Principle of Determination which divides up and lays out the Unlimited as an ordered and definite Universe is Number, and different things are, if one looks beyond their faces into their hearts, really nothing but different Numbers.

Before relegating this doctrine to the realm of fantastic and incomprehensible theories, let us stop and ponder it a moment. When we think of a number we generally have in mind simply the Roman or Arabic numeral by which we sum it up and symbolize it. For instance, if we think of the number "eight" there comes before our eyes simply the figure 8, or VIII. But this figure is nothing in itself. It stands for something, for eight something, or at least for eight anything. It means among other things the ability to point your finger at a line of objects and count them out. This line may be a line of all sorts of things, or, if one is abstractedly minded, it may be simply a line of plots or positions in empty space which things might occupy. But in any case the plot of space occu-

pied by the series is the sum, so to speak, of the plots occupied by each member of the line.

Or, again, any one of the plots occupied by any member of the series may be subdivided into smaller plots that shrink eventually into points. And we may finally come to the conclusion that it would take such or such a number of little plots or points to fill in the outlines of any given object. It might take, for instance, thirty-seven of them to fill in, or rather out, the contours of a pug-dog, and two hundred and fifty to complete the measure of a man. In that case the nature of the pug would be the number 37; the essence of man, the number 250. And the difference between the "just enough" which makes that perfect and harmonious balance which we call a pug, and that which constitutes the proportion and equilibrium known as man, would be simply the arithmetical difference between the numbers 37 and 250.

Now this seems to be very much the way by which Pythagoreans came to the conclusion that things were really Numbers. They appear to have thought of numbers geometrically and to have used arrangements of dots in different forms as numerical symbols, along with, or instead of, the letters of the alphabet which the Greek commonly used. Aristotle tells us that Eurytus, a Pythagorean of the early Fourth Century, used to illustrate the "nature of horse, man and plant 'by means of pebbles' or counters," [3] in very much the same way, it would seem, as æsthetic station-masters to-day adorn the railway line at intervals with the names of their stations, or hospitable sentiments, or even symbolical figures, compounded of variegated plants or of the chaster and less frail material of whitewashed stones. Indeed, the commentator Alexander reports of Eurytus' method that "smearing the wall with plaster and sketching on it the figures of a man and a plant, he proceeded to fix some of the counters in the outline of his face, some in that of the hands, and some in that of the other parts, and so he completed the outline of the man he had imaged by a number of

[3] Burnet, *Greek Philosophy, Thales to Plato,* p. 90.

counters equal in number to the units which he said defined man." [4]

Later, after the impossibility of constructing the line, and hence the plane or the solid, out of pure mathematical points had been recognized, the Pythagoreans seem to have modified their views. Things were still ultimately composed of geometrical figures to be sure, but those figures and the objects which they constituted were no longer regarded as actually numbers (that is, aggregates of points) but only as like numbers. This new twist in their teaching made possible all sorts of fantastic applications. Many things, such as moral qualities, social institutions, etc., which could scarcely be regarded as composed of mathematical points might be fancied to have some picturesque or mysterious affinity with this number rather than that. Thus we find a square number assigned to justice, and the number five, which is the union of the first odd with the first even combination of units, applied to marriage.

The religious beliefs and the philosophical speculations of the Pythagoreans could not exist side by side in the same individual minds and the same school of thought without infecting each other to some extent. Just as the confluent waters of the Rhone and the Saône, so distinct from one another in color at their conjunction, soon mingle and merge, so the two elements in Pythagoreanism, drawn apparently from quite different sources, rapidly blended. The process was doubtless facilitated by the essential congeniality of the two lines of thought. Both were dualistic and emphasized the conflict of opposites in the world. The Orphic strain set the soul in violent opposition to the body, as a principle of good at war with one of evil, while philosophic speculation found Limit and Determination forever at variance with the Indeterminate.

The result was that the moral dualism was reinforced with a philosophic foundation, and the philosophic doctrine of the conflict of opposites took on a moral and religious significance. As the world split asunder into pairs of arithmetical qualities (which in the end were reduced to the fundamental opposition of the Limited and the Unlimited), all those on one side of the

[4] Quoted by Burnet, *op. cit.*, p. 91.

line of cleavage tended to be regarded as better than those on the other. The fundamental contrast of good and bad was already patent; so, also, that of the soul to the body was obviously one of the better to the worse. And the dry, the bright, and the warm were pleasanter, so far at any rate as weather and many other important considerations were concerned, than the wet, the dark, and the cold. So, too, the straight was easier and neater and honester than the crooked, and activity was to be preferred to inertia, or again the square is a trig, the oblong a lopsided, figure. Whatever the logical character of any antithesis, a reason could always be found for regarding one of its members as more respectable, the other as more disreputable, than its opposite.

Again, this pervasive contrast of good and evil in the world found in the opposition of Limit and the Indeterminate a ready and appropriate foundation. The idea of the Infinite, it will be remembered, did not strike the Hellenic as it has struck the modern mind. It suggested not perfection but formlessness and confusion. It was the limited and the definite in things which gave them character and perfection. Only as they were distinct and defined did they have a nature to realize and express. The logical, then, already suggested a moral, opposition between the principle of Limit and that of Indetermination. The Indeterminate was the natural and inevitable candidate for the principle of evil and imperfection, Limit and Number for the principle of good.

Now everything, whether good or bad, actually is, or at least is like, some number. But how is it possible that the things which are undesirable and evil should be composed of or modeled after that which is the principle of goodness and perfection? A scrutiny of the number series gives the answer. In that series a most convenient and suggestive opposition immediately reveals itself. We make a distinction between odd and even numbers. This distinction arises out of the quite different attitudes assumed by the two series towards the process of bisection. Every even number is naturally addicted to the habit of bisection. All may be bisected at least once without resistance or protest, and will go on taking "just one more"

till some odd number appears on the scene and arrests them. If left, however, to the dictates of their even nature they go on bisecting and are soon increased to Falstaffian proportions below the line. Infinity alone can bound their capacity and slake their thirst. They display, that is, a propensity and sometimes a passion for the Unlimited and Indeterminate.

The even numbers, then, will always "go the limit" set by the odd, and are often literally beyond it. But the odd have principles which forbid indulgence in bisection and dalliance with the Unlimited. If they are forced to it by some overzealous admirer of arithmetic, the result is apt to be an improper, vulgar fraction and a "hang-over." Essentially limited in nature, they make it their chief mission in mathematical life to prohibit and suppress in others the bisection which they are incapable of enjoying themselves. Many a pleasant process of division is stopped, many an even number is kept from going entirely to pieces, by their interference. Nay more, each even number whose bisection they interrupt is straightway converted by them into two odd ones. All in all, if the even numbers are the Cavaliers, the odd are the Puritans, of arithmetic.

So it is that the even numbers by their addiction to bisection betray the cloven hoof. They are "limbs of Satan," in close alliance with the Indeterminate. And being already in themselves so full of the devil, they make fit material and filling for his works. It is with them that the worse member in each pair of opposites is indubitably stuffed. Scratch the crooked, or the damp, or the oblong, or the feminine, and you will surely find their Tartar "even" nature. The better member of the pair, on the other hand—a true straight line, or a dry, bright day, or a "well-rounded" square, or a real man—is some respectable odd number, the product pure and undefiled of Limit and Determination and integrity and good form.

The general development of Pythagoreanism and the modifications and embellishments which it received at the hands of its various adherents and exponents, it is very difficult, and for our purposes perhaps unprofitable, to follow. We may, however, note the view that the immediate successors of Pythagoras

tended to minimize and eliminate the religious and mystical elements in his teaching, and to emphasize and develop philosophical and scientific speculation.[5] The Pythagorean doctrine, for example, current in the time of Plato, that the soul was the harmony of the various parts and functions of the body, follows naturally enough from the views about the Mean and Number which we have just been discussing. But it is quite out of keeping with the religious belief that the soul is antagonistic to and imprisoned in the body, and is reincarnated in one new life after another. This way of looking at the matter may help explain the unembarrassed way in which during the Fourth Century Pythagoreanism as a philosophy disappeared within the portals of the School of Plato never to reëmerge.

However, the religious side of Pythagoreanism, or as we might say, the Pythagorean version of Orphism, was kept alive by some members of the School. And if it was discredited and scorned by the philosophically and scientifically minded branch of the Society, it lived to taste a splendid revenge. It was to come into its own again, riding on the crest of the swelling wave of mysticism which inundated the Græco-Roman world in the First Century B. C. To it, rather than to the scientific and philosophical attainments of the School, were due the revival of the name and the mysterious prestige of the Master, in the so-called Neo-Pythagorean movement.

Besides their work in music and medicine and mathematics, the Pythagoreans made a distinguished contribution to astronomy. Pythagoras himself seems to have held to Anaximander's three-ring theory of hoops of fire, lunar, solar, and stellar, revolving about the earth. And apparently he thought of these rings as revolving in a musical relation to one another like that of the intervals between the concordant notes of the lyre. This is the origin of our well-known phrase "the music of the spheres."

To later members of the School, however, it occurred that the earth was not the center of the universe, but itself revolved along with the other planets about some central point. This

[5] Burnet, *Early Greek Philosophy,* 3rd ed., p. 86.

point, in their estimation, was not the sun (which they reckoned among the planets) but what they called the central fire. We cannot see this fire because the face of the earth on which we live is always turned away from it, just as the other side of the moon is always invisible to us. They also assumed a body called the "counter-earth," which like the central fire, and for the same reasons, was always beyond our ken. But its shadow is visible in the eclipses of the moon, to explain which, apparently, its existence was assumed.

Let us now conclude our discussion of the Pythagoreans by noting such new turns as they may seem to have given to the development of philosophical speculation. The most obvious novelty perhaps is their dualistic suggestion that the world is not all of one piece, but must be referred to two equally fundamental and opposed Principles. To the Milesian School it did not occur that there could be more than one World-Substance or Principle. The great step forward of the earlier philosophers, that indeed which conferred upon their speculations the title of philosophy, lay in their sudden realization and grasp of the surface unity of the Universe. The World at any rate is one Fact; the sum total of existence is a single thing. And the singleness of its face they transferred quite naïvely to its heart, accepting as a matter of course that there was only one Principle at the basis of all things, and asking only whether that Principle was Water or Air or what not. Even Xenophanes, who had suggested that the World was made of two kinds of stuff, earth and water, seems to have been kept by his pantheistic musings and agnostic doubts from ever pressing the question to a point where he would have been forced to choose between a one substance theory like that of the Milesians, or some sort of dualism. He, too, was engrossed with the vision of the World as one sum and aggregate of things.

But the attention of the Pythagoreans was drawn from the very start to the diversities and contradictions on the face of things. They saw their world riven asunder on every side by oppositions, logical, moral, and perceptual, of ideas, values, and natural phenomena. When they looked more closely at

these antitheses, they saw, not, like Anaximander, some sort of indefinite Unity behind them in which all were merged and swallowed up, but rather more and deeper opposition, till finally Reality was cleft to its very roots, and fell apart into the two antithetical World-Principles which we have been discussing.

Henceforth the question whether Reality was at heart One or Many was to be a philosophic problem of the first importance. And the dualistic reply which the Pythagoreans gave when they raised the question was to exert great influence in the succeeding centuries of ancient philosophy.

Furthermore, the Pythagoreans not only mothered—if indeed they did not father—the idea that the World was to be explained by the interaction of two opposite principles, but they also made a suggestion, accepted and developed by subsequent philosophers, as to what those two principles were. And in so doing they added two new and indispensable concepts to the philosophic tool-shop, notably the concept of "Form" as distinguished from that of "Matter."

The Milesians, as we have seen, were apparently unconscious that this distinction made any philosophic difference. Practically, of course, they used it every day of their lives, as any intelligence must which is human and whose experience is not a chaos. They recognized the similarities of things, and grouped them under the same or diverse species. They made different materials into the same form, as when they fashioned bronze or gold or ivory or marble into a statue. And they molded the same material into different forms, gold into a coin, or a ring, or a cup, marble into a bath or a column. But they did not think of the distinction between the "Form" and the "Matter" of a thing as something which perhaps bit deep into the inmost reality of the object and might even reach that core of things to which their speculations were seeking to penetrate. Form and Matter were for them superficial phases which were not essentially contrasted, but were soon lost and dissolved in the unity of the one living, moving, developing Thing which lay so close beneath the surface variety of the world.

The Pythagoreans, however, evoked the two concepts into separate and distinct life and made them philosophically significant. The Number which defined the space and quantity of any given thing was, as we have seen, literally its Form—was in fact an aggregate of points or dots taking on the shape of the object in question. The difference between things was a difference of Form only. It was the enumerating Number, the enclosing Figure, which made this plot of space a man, and that a tree. In the same way, the Unlimited simply provided the wherewithal for enclosure and enumeration. It was the medium on which the points or dots were laid out or impressed. In other words, it was the material which was measured out according to this or that number to take on this or that shape. Without it there would have been nothing to arrange the dots in, or to impress them on. Numbers and figures would have had to remain purely abstract and purely imaginary. / The lion would have been no more fearsome than the unicorn, and there would have been no land but fairyland. In a word, if Limit and Number gave its shape to the world and determined the forms of all that dwell therein, it was the Unlimited which turned these shapes, otherwise fantastic and "unreal," into a tangible, concrete, solid, energetic, "real" Universe. The Unlimited was the matter of which things are made, just as Numbers were the forms in which they were molded.

We can see how easily this notion of the shape or figure of an object as something distinct from the matter which takes the shape in question, might develop into a wider and profounder view. After all, things do not differ from one another in point of shape alone, but in many other respects. A tree is different from a man not only in size and figure, but also in the uses to which it can be put. Its total value and significance in the world is quite different. It is defined differently. It has its own character or nature of "tree-ness." And it is this character—that is, all which is summed up in the logical concept of tree—that makes the concrete plots of existence in which it embodies itself a forest of particular trees rather than a crowd of individual men. Form has now passed from a merely physical to a logical significance. It is no longer

simply the outer shape, but the total definable character of an object. This further development of the meaning of Form, and the great importance of the Pythagorean distinction between Form and Matter we shall realize when we come to discuss the Platonic and the Aristotelian systems.

We take leave, then, of the Pythagoreans, feeling that philosophy has made a notable advance. It has begun to dissect the World, and it has made a startling discovery about the anatomy of the Universe. Reality is not all one inside, but it has an internal apparatus which presents rather a complicated appearance. There, for instance, is Matter, and there, rather closely adhering to Matter but still obviously a distinct organ with a distinct function, is Form. There, too, is the Soul hitherto not clearly differentiated and localized, but now discovered to be a separate part of Reality with distinctive marks of its own and indeed displaying a marked antipathy for the physical aspect of the Universe.

Again, we find an interesting process going on by which two or three sciences are being "budded off," like young polyps or potatoes from a parent organism. Music is bulging out here, medicine and astronomy and mathematics there. They have not yet broken through the skin of the all-inclusive philosophic interest, but it is obvious that nuclei have formed about which more specialized and detached interests have begun to gather and grow. That they will eventually break out and away, and the form which they will take, can now be predicted.

## CHAPTER V

## HERACLEITUS

Just a hundred years separate Heracleitus from Thales. Born at Ephesus some time in the latter half of the Seventh Century, he was in his prime about 500 B. C., and it is probable that he lived to see the battle of Marathon, and perhaps that of Salamis. Of his work we possess only fragments, and these are written in a style which already in antiquity had gained him the title of "the obscure." By birth an aristocrat of the aristocrats—the religious title and office of "king" seems to have been hereditary in his family—he was himself, a later biographer [1] tells us, an arrogant and haughty man. For the "people" and democratic government he had a keen disdain, founded not wholly upon the prejudice of his class, but in part at any rate upon a very just appreciation of their faults. Certainly he had estimated quite correctly what has proved to be a constant and apparently incorrigible petulance in the temper of democracy at all times and places, when, apropos of the exile of his friend Hermodorus, he put into the mouths of his fellow-Ephesians the cry, "We will have none who is best among us; if there be any such, let him be so elsewhere and among others." [2] We may wonder what he would have said had he known that in later times this sentiment would come to be regarded by some as the last word in the art of government, and that the voice which uttered it would be called the voice of God.

For such middle-class nonconformity, half ritualistic, half evangelical, as Orphism he had also scant respect. The Orphics,

[1] Diogenes Laertius.

[2] Fragment 114. (The translations of Heracleitus are all taken from Burnet's *Early Greek Philosophy,* 3rd ed., pp. 132-141.)

he tells us, are to be classed along with "night-walkers" and "mystery-mongers." "The mysteries practised among men are unholy mysteries." [3] The phallic rites with which Dionysus was worshiped are shameless, praying to images as senseless as invoking the walls of a house, and purification by the cleansing blood of a sacred animal as foolish as trying to wash off mud with mud. The "orthodox" Homeric theology, however, fared no better at his hands than at those of Xenophanes. Homer he tells us "should be turned out of the lists and whipped," [4] and for Hesiod he had as little use. "The wisest man" he felt was "an ape compared to God, just as the most beautiful ape is ugly compared to man." [5] God is all things, as Xenophanes had declared. He is "day and night, winter and summer, war and peace, surfeit and hunger; but he takes various shapes, just as fire, when it is mingled with spices, is named according to the savor of each." [6]

Still, for reasons which we shall point out later, Heracleitus considered Xenophanes superficial and second-rate. Nor had he any higher opinion of Pythagoras. Both of them he dismissed with the remark that a varied learning does not inculcate understanding, else it would have taught them something.[7] Indeed he seems to have felt that all of his predecessors had been quite in the dark, and that it had been reserved for him to discover and enunciate the first philosophic system of any account. This conceit was in part justified, for his interpretation of the world is regarded by many as by far the most brilliant and profound philosophy of the two centuries which intervene between Thales and the teachings of Democritus and Plato.

In their table of the ten fundamental oppositions the Pythagoreans had already included the antithesis of Rest and Motion. In their preoccupation, however, with the relations of the Limited and Unlimited, which their interest in music and mathematics disposed them to regard as the central philosophic problem, they had passed over the other antitheses as of secondary importance.

[3] Fr. 125. [4] Fr. 119. [5] Fr. 98, 99. [6] Fr. 36. [7] Fr. 16.

But the interweaving of change and changelessness throughout the pattern and fabric of the world, though it might for the moment escape the attention of the philosopher, had already arrested the vision and moved the imagination of the prophet and the poet. Man had measured the transitoriness of his own existence against the fixity of nature and the deathlessness of the blessed Gods, and Homer and Hesiod and the Gnomic poets had divined the tragedy of a creature whose mind could move for a brief space, free and godlike, amid things eternal, whilst its body must stumble a little while and fall at last amid the wreckage of Time.

The conflicting magic, too, of rest and restlessness is as old as the human soul, whose varying moods of zest and weariness, its "bugles of dawn" and "flutes of rest" alternately enchant. Desire wavers like Odysseus between the longing for final homecoming and the thirst for fresh adventure. The Gods of the one mood are throned in unshaken serenity high above all the noise and the running to and fro, rescued from Time and Change. Their seats are upon the "pillours of Eternity," afar off in some bright stormless space unreached by wind and frost and rain, bathed in steady and unclouded light. The Gods of the other are no calm Olympians. Their dwelling is the storm cloud, the surge, the hurricane, the misty land seen through the driving rain, the beckoning finger of smoke spied over the treetops of the unknown forests, the cave of Polyphemus, the Sirens' Isle. For they are, Dionysus-like, just the wine, the intoxication, the exhilaration, the inexhaustible novelty of the ever-unfolding adventure.

With the contrast, then, of change and changelessness ever before his eyes, and his desire continually torn by their appeal to the intermingling moods of a spirit half eager and half weary, it was inevitable that as soon as man began to guess behind the face of things a heart, he should ask himself whether permanence or change was the truer index to its nature. Is the essence of all things restlessness or rest? Is Reality changing or changeless? Is it, to use the language of modern science, dynamic or static, energy or matter? Is it, as the modern philosopher might say, an Activity and Process, or is it a Sub-

stance? Is it, to employ the terms which the Greek used, Becoming or Being? . . .

It is perhaps from the quarter of the Milesian School that we may best directly approach the Heracleitan theory that Reality is essentially Change rather than a Substance unaltered by its apparent changes. The Milesians had unwittingly raised a question as important as it was difficult. In reducing the variety of the world to a single principle they had assumed both that a simple substance like Water or Air can become different things, and that it can somehow at the same time remain itself and still continue to be Water or Air underneath all its apparent transformations. To speak more technically, they had on their hands—without handling it—the problem of the relation of the One to the Many, and of the persistence of Identity through Change.

Now, a little reflection upon this problem might easily breed a certain skepticism of mind. Is it thinkable, we might ask, that any given substance should of its own initiative, and without the admixture of any outside force or element, turn into something else? Is it any more reasonable to suppose that Water really can surreptitiously turn itself into a suit of clothes, for instance, than that a red bandana handkerchief can actually within the privacy of a conjurer's tophat become a white rabbit or a glass of beer? This, however, represents only half the strain to which our credulity is put. For we are also asked to believe that the World-Substance remains the same during and in spite of its transformations. The suit of clothes is really Water all the time that Water is supposed to have become a suit of clothes. The red bandana handkerchief is both itself and also a white rabbit and a glass of beer all at once. The One is both One and Many, Reality is simultaneously both the single homogeneous thing it really is and the many different things it really is not.

The Milesian theory, then, that all things are made of one and the same single World-Substance might on investigation look suspiciously like a mere juggler's trick, and the marvelousness of its feat was bound to inspire criticism and distrust. We would seem, indeed, to be confronted with a dilemma. If

the Universe is really always the same single substance, then it is not *really* many different things and does not *really* change. In other words, the many, variety, alteration, motion are merely matters of false opinion. On the other hand, if change and variety are real there can be no unchanging self-identical Unity at the heart of things.

As we shall see later, the Eleatic School apparently accepted this dilemma as absolute, and faced frankly the consequences of clinging to the theory that the World is a single self-identical Substance. Whether Heracleitus really faced the difficulty at all, and deliberately sought to escape it, we cannot say. Certainly he was not caught on either of its horns. Both his own words and the testimony of later philosophers show how his imagination was obsessed by the changing, impermanent, diversified, kaleidoscopic character of the spectacle of existence. Becoming, multiplicity, the ceaseless transformation and interchange of the Many, are no superficial misinterpretation of the nature of the Universe but are rather its very self and essence. But at the same time, Heracleitus was just as convinced as the Milesians or the Eleatic Parmenides that the Universe is one. He would not entertain the Pythagorean supposition that two equally fundamental and absolutely opposed Principles were needed to explain things. He felt like Anaximander that even the deepest and most irreconcilable opposition was grounded in an underlying unity. His problem, then, might well have been to find some sort of Oneness which, unlike the unity of the fixed elemental substances or unities proposed by the Milesians and Xenophanes, should preserve and explain, instead of destroying, the reality of Change and Multiplicity.

The solution occurred to him perhaps even before the problem was articulate in his mind. And it was very likely this sudden insight which in his opinion distinguished him from his predecessors as the first phlosopher of any consequence. It seems to have flashed across him that this new kind of Oneness which he sought lay plain and bright before the eyes of every man who had the mind to understand the witness of his senses. To see it from without a man had only to look at the fire on his hearth. To feel it from within he had only to give heed to his

own consciousness of living and experiencing. Life and experience are forever going on, different at each new instant, crowded with variety and novelty. Yet they are somehow one and the same life and experience and career through all their changes and episodes. So, too, fire in its flaring, quivering restlessness is never the same from moment to moment. It is all bright movement and agitation, the antithesis of an ever self-identical stuff like Water or Air. Yet it, too, is unbroken and continuous, one and the same fire through all its ceaseless alteration. Here, so plain that not only he who runs may read, but curiously enough that he who runs fastest may read best, is this new sort of Oneness and Identity which permits of Multiplicity and Change. Only think of the Nature of Things as something which goes on like Life or Fire, and not as a mere state of being always the same thing like Water or Air, and we have reconciled the real change and variety of the world with its no less real unity.

We shall not be surprised, then, to learn that Heracleitus felt that in Fire he was beholding face to face the stuff of which all things are made. At its touch he could see all things yielding up their individual natures and disappearing merged and indistinguishable in the moving brightness of its burning. To life and thought it exhibited an extraordinary affinity. Our bodies glow. All higher forms of life are warm to the touch. And even to-day, for all our modern chemistry and physics, we still find Fire the most animate of inanimate beings, likening, as figure after figure of speech shows, our inner experience to its brightness and heat and fitful moodiness, and making of it a companion and fellow-being in whose presence we never feel quite friendless and alone. "This world," says Heracleitus, "which is the same for all, no one of gods or men has made; but it was ever, is now, and ever shall be an ever-living Fire, with measures of it kindling, and measures going out." [8] "All things are an exchange for Fire, and Fire for all things, even as wares for gold and gold for wares." [9]

So swift, fluid, and unarrestable is this process of ceaseless transformation and exchange of which Reality consists, that

[8] Fr. 20. [9] Fr. 22.

the senses are unable to keep pace with it. They are always lagging behind, perceiving and recording the events of any given instant only after they are gone. They really only photograph, as it were, the trajectory of a flying projectile, and so-called specific things or moments are in reality merely sections of flight. In the words of Heracleitus' own simile, "You cannot step twice into the same rivers; for fresh waters are ever flowing in upon you." [10]

But the idea of Reality as Flux and Fire did more than overcome the difficulties, inherent in the Milesian systems, of deriving the Many from the One, and Change from a single simple Substance. It also enabled Heracleitus to see through the conflict of opposites which the Pythagoreans had regarded as fundamental, and to supplement the vague statements of Anaximander that opposites can arise within a single Principle, with the startling assertion that they are really identical. Flowing and burning mean a multiplicity of aspects and episodes succeeding, superseding, melting out of and into one another. Without another and different moment into which to go on, and another and different aspect to assume, there could be no such thing as Change and Flux. For it is by the contrast and opposition of the new to the old that we mark and measure change. Thus we only note and measure the waning of winter by the waxing of summer, the disappearance of hunger by the increasing feeling of satiety, the coming of day by the going of night. It is the very essence then of Process that all things should be constantly melting into their opposites, of Becoming that all things should be constantly becoming the negations of their former selves.

But at what precise instant in this inconceivably smooth, oily, and unbroken Flux of things are we to say that the old has become the new, that one moment of time has become another, that day has at last faded into night, or that spring has really come? Such an instant cannot be discovered or even conceived. For divide and subdivide Time and Change as you will, it is impossible to discover a moment which contains simply the old, or simply the new. On the contrary, there is no moment so minute

[10] Fr. 41.

as not to contain both the old and the new caught in the act of the one becoming the other.

Indeed, could we find an instant which was not a transition—an instant, for example, in which we could say that winter or night had come to a definite end but that spring or dawn had not yet begun—we should have arrested Time and destroyed Change. We should be dealing not with a transition and transformation of the old into the new, but with a mere *substitution* of the new for the old. The old would have been cut off short and an absolutely fresh beginning made in its place. In that case the Universe, if such it could be called, would be a collection of full stops and fresh starts, of moments and things annihilated with a bump and new moments and things suddenly jerked with a jolt into being from nowhere, like an American railway train entering and leaving way stations. And the inhabitant of such a world would be like a traveler forced to change cars at the junction of each instant with the next.

Change and Becoming cannot, then, consist in a succession of different occurrences rapidly substituted for one another. The new occurrence must be developed, budded off, prolonged from the old. In a word, it must be one with the old. Change means Identity in Difference.

This doctrine that opposites are identical is at first sight startling, and Aristotle later accused it of transgressing the law of self-contradiction. But after all, to take even the pairs of opposites upon which the Pythagoreans laid so much stress, what is day but a process of waning, and waxing night, night save a process of waning and waxing day? What is hunger but satiety in process of passing away, satiety but hunger disappearing? How should we ever know justice if it were not for injustice?[11] And according to even the very Orphics of whom the Pythagoreans were the disciples, what were the winter of nature and the death of man but life transformed and sleeping? What were summer-time and life but death and winter reawakened and risen from their sleep? "It is the same thing in us that is quick and dead, awake and asleep, young and old; the former are shifted and become the latter, and the latter in turn

[11] Fr. 60.

are shifted and become the former." [12] "Hades is the same as Dionysus." [13] "Mortals are immortals and immortals are mortals, one living the others' death and dying the others' life." [14] God really is both "day and night, winter and summer, war and peace, surfeit and hunger." [15] He really can "take various shapes," [16] for he is a "Going on" and a Becoming, not a permanent state of Being.

The fragments which we have been considering also suggest another remarkable characteristic of the Flux of the ever-living Fire. Change may bring novelty, but it also brings repetition. The number of pieces, colors, shapes, and combinations in its kaleidoscope is limited. The transformation of opposites works either way. Day becomes night and night becomes day again, summer winter and winter summer, life death and death life. Underlying the reciprocal conversions of these lesser cycles there is the great wheel of the elemental transformation of Fire down through fiery storm-cloud to water and thence to earth, and back through water to itself again.

At this point, perhaps, an objection might be made. Have we not fallen into a difficulty similar to that which beset the Milesian School? If Reality is Becoming, and there is really nothing but a Flux and melting of things into their opposites so swift that the mind can photograph in any given instant only a mere blurred trajectory, how do we come by the experience of permanent objects at all? Stability, permanence, rest are just as apparent in the world as flux and change and motion. But how account for them, if the latter alone are real?

Heracleitus has his answer ready. In the first place there is the fact that of the ever-living Fire fixed measures are ever kindling and fixed measures going out,[17] and that Change is a reciprocal exchange of Fire for all things, and all things for Fire. The "measures" sufficiently counterbalance each other and the exchange is sufficiently fair to assure no robbery of the other elements, but rather the presence of an approximately constant quantity of water and earth and the other variations of Fire.[18]

[12] Fr. 78. [13] Fr. 127. [14] Fr. 67. [15] Fr. 36. [16] Fr. 36. [17] Fr. 20.

[18] *Cf.* Burnet, *Early Greek Philosophy,* 3rd ed., pp. 150-151; also Burnet, *Greek Philosophy, Thales to Plato,* pp. 61-62.

But his explanation does not stop here. Take the great fundamental cycle of the transformation of Fire through water to earth and back to Fire again. This cycle, since it is a process of circulation, has a downward and an upward sweep which Heracleitus calls the Upward and the Downward Ways. In water, for example, there is at once a "downward" tendency to change into earth, and an "upward" tendency to change into fire. And fire and earth, which are at the top and bottom of the process of circulation, are moments and states of hesitation, pulled both backwards and forwards, as it were, when the upward swing of the cycle *from* water is on the point of bending over and becoming the downward swing *towards* water again, or when the downward plunge *from* water is turning into the upward return arc *towards* water. It follows that since the two ways are simply the prolongation of each other, they are one and the same, and afford a fundamental example of the identity of opposites.[19] But it also follows—and this more immediately concerns us—that each one of the three elements is pulled at one and the same time in opposite directions. It is a component of two conflicting forces, a friction of two antagonistic movements dragging against and retarding each other.

It is this pull of the Upward and Downward Way against each other which keeps fire, water, and earth all in existence, with their specific characters, at the same time. Abolish the Downward Way, for instance, and all water released from the downward drag in its nature would evaporate and shimmer away into fire. Abolish the Upward Way, and all fire would precipitate itself into water, and water turn to solid earth. But each drop of water because it is an equilibrium due to a tension of forces pulling in opposite directions, is held rigid and remains itself. When the sun is "drawing water" or water rises in mist, the "Upward Way" has for a time partially mastered the Downward; when it rains or freezes the Downward tendency has for the moment overcome the Upward. "Men do not know," says Heracleitus, "how what is at variance agrees with itself. It is an attunement of opposite tensions, like that of the bow and the lyre." [20]

[19] Fr. 69, 70. [20] Fr. 45.

Obviously permanence and stability of this sort are not mere illusions due to the deception of our senses. The Flux will really bear our weight here and there, and has characteristics which are frozen and firm and definable. But this fixed and structural character of the world is, as we see, not due to any restful and sedentary habit on its part. The immobility of any thing and all things is rather the immobility of a pair of wrestlers putting forth all their strength against each other and held rigid in a deadlock in which neither is able to down the other. The cycles in nature and history are but the slow swaying and bending back and forth of these antagonists in their struggle. And the adversaries, like the Siamese twins, are one at heart. A common Life and Fire circulating from one to the other animates their struggle with each other. Could either slay or even really down the other, he would also have downed or slain himself. "War" in very truth "is the father of all and the king of all." [21] "Homer was wrong in saying: 'Would that strife might perish from among gods and men!' He did not see that he was praying for the destruction of the universe; for, if his prayer were heard, all things would pass away." [22]

Later commentators, to be sure, particularly those of the Stoic School, found in Heracleitus the belief that from time to time one of the wrestlers does fall and the whole universe "goes up like smoke," consumed by the ever-living Fire. Then again Fire makes all things new, and there is a new heaven and a new earth and a new sea. In the fullness of time these, too, go the way of their predecessors. And to this last and most tremendous cycle of world succeeding world there is no end. This interpretation, however, has been challenged on the ground that it is incompatible with the doctrine of the strife of opposites and the counterbalancing of the Upward by the Downward Way.[23] From this other point of view Heracleitus teaches indeed a periodic oscillation in the proportional strength of the wrestlers and in the amount of the basic elements into which Fire transforms itself. But at no time does one of the Ways

[21] Fr. 44. [22] Fr. 43.

[23] Burnet, *Greek Philosophy, Thales to Plato,* pp. 178 *et seq.*

completely nullify the other or one of the wrestling opposites wholly down its opponent.

Heracleitus is also quick to recognize in the Universe another kind of permanence, invisible to the eye but readily apprehended by the mind, which does not depend for a ticklish existence upon the unstable equilibrium of conflicting activities and cross currents of change. If, for instance, the Heracleitan philosophy be true, it is a fact that all things are in perpetual and uninterrupted flux. But this fact does not itself change, any more than the fact, say, that there is a constant movement of traffic on Fifth Avenue or Piccadilly moves along with the traffic on top of a 'bus. For if the fact that all things are constantly "on the go" were itself to go, then some things at least would stop, and the Heracleitan theory would no longer be a true description of the nature of Reality. The real constitution of the Universe might now be such that at times all things move on, and at times stand still, just as the traffic on Fifth Avenue is as a matter of fact periodically checked and allowed to proceed by the policemen at the cross-streets. But again, if this be the real way in which things behave, this manner of behavior does not itself now stand and now change, any more than the fact that the traffic on Fifth Avenue is halted from time to time by a policeman is itself arrested and interrupted by him.

The same considerations hold good of those things which are stated as true about the nature of Change. If it be the nature of Becoming to involve a differentiation and at the same time an identification of opposites, this fact does not itself become different or turn into its opposite. If it be a rule of the wrestling match that the relative strength of the two opponents shall vary but that neither shall ever wholly fail, this rule is not itself now more, now less, in force. If it be a law of change that the ever-living Fire shall pursue a cycle of transformations in which its Downward Way through water to earth is checked and balanced by its Upward Way from earth through water to fire again, it is as absurd to say that this law circulates or offsets itself as it would be to maintain that the rules

which govern the uptown and downtown movement of the traffic on Fifth Avenue are themselves moving in either direction.

In a word, the truth about the Universe, whatever it may be, is changeless, not with the permanence of something lasting or even everlasting in Time, but with the validity of something whose existence is altogether outside of and independent of the Flux of Change and Becoming and Time. The fact that all things change and that their change takes place in certain definite ways and along certain well-drawn lines is an eternal thing.

Now it is the method which the thinker may descry in the apparent madness of Becoming, the orderliness which he may discover in the restless flaming of the ever-living Fire, that Heracleitus calls the "Logos." Literally the term means "word" or "thought," but we might translate it in a way more comprehensible to ourselves and at the same time not untrue to what Heracleitus has in mind, if we call it the "Law" or "Order" or "Constitution" of the world.

The "Logos" has, however, much more behind it than we express by the phrase "natural law" or "natural order." It expresses in the first place not the mere fact of how things do behave. It is prescriptive as well as descriptive, determining things to behave as they do. "Nature is constrained by the rational order of her law which lives infused in her." This fragment from Leonardo da Vinci might be a fragment from Heracleitus. The Logos enforces itself. It is a "Destiny," allotting to all things their places.[24]

Again, it includes the idea of a Reason or Wisdom immanent in the world. We must not understand by this, however, that Heracleitus regards the Logos as a personal God or a Divine Mind. He feels simply that in the Flux and the Fire there is something which responds to man's desire to know and justifies his claim to knowledge. Experience is not delirium. The world is a rational world. Its ways can be understood. And this responsive, systematic, and intelligible character of things corresponds to thought and reason in man, and is, as it were, the

[24] Fr. 137 (Diels, *Fragmenta der Vorsokratiker*), *Cf.* Frs. 19, 28 (Burnet), Döring, *Geschichte der Griechischen Philosophie,* p. 95.

objective and external counterpart of his wisdom and philosophy.

Furthermore, the Logos carries with it the notion of Justice and Right. In this respect Heracleitus, like Anaximander, is an interesting witness on the philosophical side to that very late distinction by the Greek mind between natural and moral law and order which we discussed in connection with Greek religion. We to-day should not seek to explain the fixed size of the sun on grounds of ethical propriety, nor should we, if some irregularity in its size took place, indignantly feel that the sun had "gone wrong" and violated the moral law, and upbraid the inefficiency of nature for not preventing or at least immediately detecting and setting right the aberration. But this is precisely what Heracleitus does feel. "The sun," he tells us, "will not overstep his measures: if he does the Erinyes, the handmaids of Justice, will find him out." [25] The size of the sun, that is, is the right, the moral size for it to be, if the law of measure for measure is to hold. Any alteration in it would be not merely puzzling to the intellect but shocking to the moral sense. Astronomical conditions and ethical considerations are not as yet disentangled.

The same is true of all natural phenomena. Their behavior is not to be judged or explained differently from that of human beings. The World-Order is cut out of the same cloth as the moral order. The Law apparent in the World Process, a Law of compensating movement holding all things to their natures, their places, and their courses, is the same Law as forbids and checks the excess of insolence or "hybris" among men, and counsels and enforces restraint and temperance as the fundamental virtue. The resultant stable equilibrium which is the marrow of the frame of the world is all of one piece with moral stability. There is justness as well as intelligibility in the systematic character of the transformations of the ever-living and ever-changing Fire. The "Logos" is not only the Law, the Order, the allotting Destiny, it is also the Justice which flames, world without end, at the heart of things.

Indeed, Heracleitus seems to have had a scarcely less vivid

[25] Fr. 29.

conviction of this eternal Justice at work in the World-Process than had the poet Æschylus, in the next generation, of its presence as the controlling force in human history. Both men alike saw it where it was least evident to the common eye, and wrung a reluctant testimony to its presence from the apparently most hostile evidence. As Æschylus in his tragedies found it attained and exemplified amid all the intricacies of the strife of counterbalancing motives and the balance of conflicting moral obligations, so Heracleitus saw it clearly manifest in the inextinguishable warfare which Fire, in the strife of opposites and the counterpoising of the Upward and Downward Ways, is forever waging with itself. "Strife is justice," [26] he tells us. Nay, the very evil in the world in reality contributes to this "hidden attunement" which is, he tells us, "better than the open." [27] Human laws and arrangements are full of ignorance and often wrong, but the divine arrangements of things "are fair and good and right." [28]

It would be going too far, perhaps, to say that Heracleitus is here deliberately facing and struggling with the so-called "problem of evil," which later was to assume an important place in philosophy. All the difficulties connected with the presence of evil in a world wholly subservient to justice and goodness had not yet become articulate. But undoubtedly he is once more a witness to the Greek lack of distinction between natural and moral phenomena, and thinks that the opposition of good and evil is as easily harmonized as that of day and night in the general identification of opposites.

Finally we may perhaps find in the Logos fresh evidence of the tendency of the Greek mind to think of the constitution of the Universe in political and social terms. In discussing Greek religion we contrasted this analogy, so unfamiliar to us, with our own habit of likening the World-Process to the running of a machine, the functioning of an organism, or even the development of a personal career. By Heracleitus the political analogy is given a philosophic application. The Logos or Wisdom which is common to all things and all minds, and comprehensible by all who do not "sleeping turn aside each into a world of his

[26] Fr. 62. [27] Fr. 47. [28] Fr. 61.

own,"[29] and "live as if they had a wisdom of their own,"[30] is like the laws of a city by which all the citizens are bound and to which if they are wise they must hold fast. Nay, more, all man-made laws and constitutions are derived from and part of the divine Law which "prevails as much as it will, and suffices for all things with something to spare."[31] If a man then wishes to know what the Logos is like, he has only to turn to the constitution and statutes of his own city-state. Philosophy as yet knows no dividing the substance or distinguishing the persons in this trinity of social, moral, and physical law and order.[32]

Let us fix firmly in our minds this concept of a Logos—of a Law and Order and Wisdom and Justice—in things, which it is the business and the reward of philosophy to discover amid the kaleidoscopic instability of the Flux by which our senses are bewildered and our thinking confused. It has a great and splendid part to play in the future development of Greek philosophy. We may make, for instance, one of the most interesting among the many approaches to Plato, if we regard his system as essentially an amplification of the Heracleitan philosophy in which the weight of real existence has been shifted from the Flux of phenomena to a more deeply pondered Logos analyzed and enriched by the inclusion within it, not only of cosmic laws such as Heracleitus had discovered, but also of the fixed species and forms of things by which the senses are steadied and the foundations of thinking laid, and of the moral and æsthetic values by which human happiness is given content and definition, and human conduct is regulated. In Stoicism, too, we shall find the Logos in the concept of a rational and providential World-Order assigning to all things and men their places and rôles in the play of events, and in the idea of the universe as a commonwealth of Gods and men constituting the "dear city of Zeus." Finally, it enters Christian theology, and becomes part of the "faith once for all delivered unto the saints" in the opening lines of the Fourth Gospel. "In the beginning was the Word, and the Word was with God and the

[29] Fr. 95. [30] Fr. 92. [31] Fr. 91*b*.

[32] *Cf.* Burnet, *Early Greek Philosophy*, 2nd ed., pp. 131-132, 3rd ed., p. 168, and Cornford, *From Religion to Philosophy*, pp. 191-192.

Word was God. . . . And the Word was made flesh and dwelt among us." [32a]

Some account of Heracleitus' astronomical and meteorological views has come down to us in a passage, generally considered trustworthy, of Diogenes Laertius.

"He held, too, that exhalations arose both from the sea and the land; some bright and pure, others dark. Fire was nourished by the bright ones, and moisture by the others.

"He does not make it clear what is the nature of that which surrounds the world. He held, however, that there were bowls in it with the concave sides turned towards us, in which the bright exhalations were collected and produced flames. These were the heavenly bodies.

"The flame of the sun was the brightest and warmest; for the other heavenly bodies were more distant from the earth; and for that reason gave less light and heat. The moon, on the other hand, was nearer the earth; but it moved through an impure region. The sun moved in a bright and unmixed region and at the same time was at just the right distance from us. That is why it gives more heat and light. The eclipses of the sun and moon were due to the turning of the bowls upwards, while the monthly phases of the moon were produced by a slight turning of its bowl.

"Day and night, months and seasons and years, rains and winds, and things like these were due to the different exhalations. The bright exhalation, when ignited in the circle of the sun, produced day, and the preponderance of the opposite exhalations produced night. The increase of warmth proceeding from the bright exhalations produced summer, and the multiplication of moisture from the dark exhalation produced winter. He assigns the causes of other things in conformity with this.

"As to the earth he makes no clear statement about its nature, any more than he does about that of the bowls." [33]

There are also fragments which evince a considerable interest on Heracleitus' part in the problems of human conduct and happiness. It may be, indeed, that could we recover his works

[32a] But *cf.* Burnet, *Early Greek Philosophy,* 3rd ed., p. 133, note 1, for the view that Heracleitus meant by the Logos merely his own teaching, and that the Christian Logos is of Hebrew, not Greek origin.

[33] Diogenes Laertius (trans. Burnet, *Early Greek Philosophy,* 3rd ed., pp. 147-148).

in their entirety, we should find among them something like a treatise on ethics. The fragments show an aristocratic disdain of the common people, their standards, and their ways. Moral as well as intellectual enlightenment comes from a perception of the Logos, or order in things, and through conformity with it. The means for such conformity is present in the shape of reason in all men, but the ordinary people make no use of it. "We must follow the common, yet . . . the many live as if they had a wisdom of their own. They are estranged from that with which they have most constant intercourse." [34] As a result "they follow the poets and take the crowd as their teacher," and "even the best of them choose one thing above all others, immortal glory among mortals, while most of them are glutted like beasts." [35]

But this "wantonness needs putting out even more than a house on fire. It is not good for men to get all they wish to get. It is sickness that makes health pleasant; evil, good; hunger, plenty; weariness, rest." [36] This last truth is just what the truly wise man perceives by virtue of his acquaintance with the law of contradiction inherent in the ever-living and ever-changing Fire. Hence, where the common herd complain, he will cheerfully accept, where they seek to avoid hardship he will welcome it, where they flinch at pain he will bear it, knowing that by so doing he is conforming his nature to the nature of the Universe, and that "the way of man has no wisdom, but that of God has." [37]

"It is hard," however, "to fight with one's heart's desire." [38] For the conflict of desire with reason is part of the cosmic struggle of opposites. Wisdom and reason are dryness and fire in the soul. "The dry soul is the wisest and best." [39] It deteriorates when it gets wet; witness the man who "when he gets drunk is led by a beardless lad, tripping, knowing not where he steps, having his soul moist." [40] But it is "pleasure to souls to become moist," [41] as almost every one can testify. The seduction, then, of the rational will by pleasure is incidental to the cyclical transformation of the World-Fire, and the difficult

[34] Fr. 92, 93. [35] Fr. 111. [36] Fr. 103, 104. [37] Fr. 96.
[38] Fr. 105-107. [39] Fr. 74-76. [40] Fr. 73. [41] Fr. 72.

questions of conduct and morality are the inevitable problems of a life torn literally between the Upward and the Downward Ways.

Psychology, also, as well as ethics, is beginning in Heracleitus to "bud off" from the parent organism of general, undifferentiated philosophic speculation. We have noted how naturally reflection upon the fact and behavior of the living, moving, streaming consciousness within one's own heart might inspire the idea that perhaps the inner Nature of Things in general was also a living Activity, one and many, different and identical, all at the same time. Mr. Burnet, indeed, considers Heracleitus' emphasis on the Soul as of first importance to an understanding of his system, and carries the interpretation of the phenomena of the outer world in terms of the inner states and experiences of consciousness so far as to say that "Life, Sleep, Death correspond to Fire, Water, Earth, and the latter are to be understood from the former." [42] Both he and Mr. Cornford [43] suggest that this stress upon the animate aspects of the world is due to the influence of the Mysteries, with their insistence upon the Soul as an inexhaustible principle of Life in Man and Nature, of whose activity death is but a momentary phase.[44] However that may be, there can be no doubt of Heracleitus' persistent use of the term "Soul" and his interest in what we should call "psychological" phenomena. "You will not find the boundaries of the soul by traveling in any direction." [45] And, as we saw in connection with his ethical views, he regarded wisdom and virtue as a state of dryness and fire in the soul, folly as a state of moisture.

Again, he distinguishes fairly clearly within the soul between the senses and reason. The senses, he implies, present us only with the Flux, with a confused, inevitably rapid kaleidoscope of experience. It is another faculty which discovers the real

[42] Burnet, *Greek Philosophy, Thales to Plato,* p. 60.

[43] *From Religion to Philosophy,* pp. 187 *et seq.*

[44] It has even been argued that the whole system of Heracleitus is merely the Orphic theology, and particularly the doctrine of rebirth, cast into philosophic form. *Cf.* Macchioro, *Zagreus,* pp. 247 *et seq.,* and his *Eraclito Efesio.*

[45] Fr. 71.

method of Logos in the apparent madness of the Flux. To put it in modern terms: we perceive with our senses falling apples only, not the law of gravitation. It is reflection and reasoning which give us the mathematical formula that bodies attract each other in direct proportion to their masses and in inverse proportion to the square of their distances, to which the perceived movements of bodies always conform.

We may, then, discover in Heracleitus a sufficient preoccupation with the fact and phenomena of consciousness to impute to him a rudimentary psychology. But we must accompany even this statement with a reservation. Psychology has been defined as the "description and explanation of states of consciousness as such." [46] Certainly it denotes a clear demarcation of conscious from other phenomena. But we may very much doubt whether Heracleitus ever cornered "consciousness as such," or distinguished sharply between the conscious and living and the other aspects of the world. It was rather that the other aspects tended in his mind to become blurred and confused in the ceaseless flowing and sparkling of things, which was to be seen at its best in the restless brilliancy of both the flaming Fire and the life and experiences going on within us. He no more than the Milesians really extricated the conscious and living properties from the spatial and solid and substantial qualities of the world-mass in which they lay infused and imbedded, or erected them into a separate principle or even a really distinct aspect of Reality. There is nowhere in the fragments any direct opposition of soul to body or of mind to matter, excellent illustration as he might have made it of his theory of the conflict and identity of opposites. Nor can we claim with any more right that he had distinguished the concepts of matter and motion, energy and substance, from one another.

The truth would seem to be that he had not reached the point of drawing and sorting the separate threads which enter into the intricate spinning of the world. The Universe struck him, as it had struck the Milesians, as all cut of the same cloth, though the cloth to his eye was not solid and substantial but a changeable silk all sheen and shimmer. He simply accented the

[46] Ladd, quoted by James, "Psychology" (Briefer Course), p. 1.

dynamic—the living and the moving—rather than the spatial and solid properties of Reality, and resolved without having previously clearly differentiated them the solid and rigid into terms of the fluid, as when he found in Rest the tension of conflicting and compensating Motions.

In somewhat the same way, more than two thousand years later, the philosopher Leibnitz was to see in the extended and impenetrable qualities of matter mere secondary phases of energy, and was to find in a carefully reasoned idea of Force a least common denominator for the external world and the inner life, such as Heracleitus had found in Fire. But whereas Heracleitus had started with the whole cloth, caught the general effect, and outlined the pattern, without really unraveling and separating the interwoven principles and concepts, Leibnitz began with the notions of force, life, mind, extension, solidity and the like, all clear and distinct, carefully disentangled and sorted in his mind, and then proceeded to weave them into a system.

There is another point also with reference to which we should be on our guard. A long and imposing development in the history of philosophy has predisposed us to contrast the presentations of the senses with the results of reflection and reasoning in terms of Appearance and Reality. The senses we feel, if they do not deceive us out and out, at least present us with a very distorted and unreal view of the Nature of Things. It is the business of thought and reflection to correct this false view of things, and to tell us what the Universe is really like. Now when Heracleitus distinguishes within the mind between wisdom and sensation, and in the objective world between the Logos and the Flux, it is not unnatural to hail him as the prophet of this differentiation of Appearance from Reality. But the contrast of the Logos to the Flux carries no such implication in his mind. The Flux is no less real than the Logos. It is not an illusion. It is not "false opinion." It is not "mere" appearance. The senses in recording it do not falsify the real Nature of Things, but present it as it is. They see face to face —not as through a glass darkly—the ever-living Fire and the ceaseless transformation which is its essence and the essence of

all things. Wisdom, Reason, merely beholds in addition the systematic character of the World-Process.

It is equally dubious to run to the other extreme, and classify Heracleitus as an "empiricist." For by empiricism we habitually understand not simply the teaching that the senses present us with the Nature of Things as it really is, but also the doctrine that no amount of hard thinking can find out anything more about the world than the senses already have revealed, and that the so-called "real worlds" which science and philosophy think they can read between the lines of the world of phenomena are nothing but rather arid though useful synopses of the rich and vivid text of the book of immediate life. Heracleitus may be called an empiricist in one sense of the term, but not in the other. He has confidence in the senses, but he has no distrust of reason. Reason for him was not a mere extension of the process of sensation. It discovered more in Reality than the senses revealed. It spied the Logos, to which the senses were congenitally blind. Nor was this Logos a mere abstraction. It was something as real, as vital, as the process and movement itself.

But though Heracleitus' distinction between the Logos and the Flux probably does not imply any invidious distinction on his part between the senses and reason in point of trustworthiness, or justify us in classifying him as either an empiricist or a rationalist or, for that matter, in even imputing to him the common philosophic differentiation of Appearance from Reality, it perhaps does permit us to see in his doctrine a further development of concept of "Form" and "Matter." These notions, we found, were distinguished by the Pythagoreans in their doctrine of a Principle of Limit demarcating within the Field of the Unlimited the allotments and boundaries of the specific plots which we call individual things. The Form was the actual outline or figure of the object and the measure of the amount of ground or stuff or "matter" enclosed by it. And we saw how susceptible these concepts were of a much wider and more profound application.

In this application the concept of the Logos marks an important step. Form is no longer merely an outline and ex-

ternal figure or an enumeration of the visible measure of a thing, as it was for the Pythagoreans. The doctrine of the Logos adds to it as constituents, the ideas of Law and Order and System, enlarges it so as to cover the whole Universe with one comprehensive Constitution or Law or Form of Existence, and deepens it by asserting that Law and Order are not superficial but rather sink so much more profoundly into the fiery essence of things than the unaided eye can reach as to require the assistance of reason to perceive them. In a word, the idea of the principle of Form is passing in the system of Heracleitus from the realm of the picturesque into that of the abstract and the logical. It is no longer a representation of the shape, it is the definition of the nature, of an object. Beneath the panorama of existence a map has been once and for all discerned.

In the same way, Heracleitus, though he does not follow the Pythagoreans in their metaphysical separation of the principle of Matter from that of Form, nevertheless contributes largely to the growth in later philosophy of the concept of such a separate principle. The Pythagoreans, with their doctrine of the Unlimited, had already suggested indefiniteness and lack of determination as characteristic of "Matter" in contradistinction to "Form." And Heracleitus in contrasting the liquid and impermanent stuff of a world dissolved in Time and Change with the rigidity and unchangeableness of the Law regulating the Flux, added the transitoriness and the restlessness, the ceaseless growth and decay, which in the systems of Plato and Aristotle are such essential marks of Matter as opposed to Form or Idea.

With the death of Heracleitus, the philosophic preëminence of Ionia came to an end. The cities which for a brilliant and fertile century had been the mother and nurse of the speculative genius ceased to bear and foster. The spirit of philosophy passed westwards to Southern Italy and Sicily, to a home already in part prepared for it by the Pythagoreans. Nor was it to return to the coasts and islands of Asia Minor for well-nigh a hundred and fifty years; and then to find a cradle only and not a home. Melissus, to be sure, was a Samian, but he is

identified with the Eleatic School. Leucippus, born perhaps at Miletus, is a shadowy figure whose whole substance lies in Democritus. And though Anaxagoras came from Clazomenæ, and Epicurus and the founder of the Stoic School, Zeno, were born in Samos and in Cyprus, they lived and taught in Athens, and their fame redounded to the glory of their adopted rather than of their native country. So, too, later leaders of the Stoic School, Asiatic by birth, settled in Athens, or passed on to Rome. We are, then, taking our last look at Ionia.

But before embarking on the next chapter, let us review for a moment such restoration of the system of Heracleitus as we were able to make from the fragments and ruins of his writings.

Reality is something whose essence is Becoming, not mere Being. It is ever-changing Fire, not ever-the-same Water or Air as the Milesians thought.

Change and Activity, however, involve a startling paradox. The changing object is both the same and not the same. It is not the same, since it is forever passing on into a new moment of time, a new state of being, a new self, different from and opposed to the old. It remains the same, nevertheless, for otherwise we should be dealing, not with the successive transformations of a single object, but simply with a succession of different objects created and annihilated one after the other. Change, then, somehow joins together the moments and states and selves which it puts asunder. It is a unity of differences, an identity of opposites, paradoxical though such a statement may seem.

But Change also involves tension and conflict. It holds both together and apart pairs of moments, conditions, selves, which are struggling away from each other to be different, and towards each other in order to be the same. Locked in one another's embrace, these opposites wrestle against each other. And the pitting of effort against effort, motion against motion, gives the world its stability and permanence. Hence, instead of all things being each moment wholly changed and rechanged in the twinkling of an eye, we have the prolongations and slow regularities characteristic of the Flux. There is a Law to which the World-Process conforms. And this Order which

change always follows itself never changes. The nature of the World-Fire is a Process of Transformation taking place in a fixed and definite way. This nature is equally present and exemplified in any and every mood and moment of the restless Fire. It is unaltered by Time, the passage of which makes no difference to it. Its permanence, then, is not like the duration of a thing floating on and on, it may be forever, on the surface of the Flux. It is not everlasting in Time. It is lifted clear of Time and Becoming altogether. It is eternal.

This Nature or Law or Order Heracleitus calls the Logos. It is the object and counterpart of reason within us. Since it is a law of balance and compensation, building up harmony and stability out of conflict, it also appeals to our sense of justice. Indeed to understand and accept it, we have only to reflect upon the social and political order which is the expression both of the Logos and of the rational will of man. To resolve the Universe, then, into the fitful flaming of Fire, to analyze all rest into motion and all stability into change, is not to reduce all things to chaos. For the Universe still has an eternal Form and Constitution, which guarantees that everything which happens is in conformity with a law which is comprehensible and just.

Both the concepts of the Logos and the Flux, as we have seen, are great steps forward in the development of the important distinction in Greek Philosophy between the Form of a thing, which defines its Nature, and the Material Principle which stuffs the Form with concrete existence and enacts it temporarily and incompletely in a specific object.

We also detected in the Heracleitan system signs that ethics and psychology were already beginning to differentiate and specify themselves, and to bud off from the parent organism of general speculative interest.

And now let us set sail for Elea in Italy, there to take up the subject of the next chapter.

## CHAPTER VI

## THE ELEATIC SCHOOL

The flight of philosophy from the coasts of Asia Minor to the southern shores of Italy is full of romance and adventure. Before the Lydian Empire and all the wealth of Crœsus had fallen into the hands of the victorious Persians, the philosopher Thales, it will be remembered, advocated in vain the union of the Ionian cities in a single league, the better to withstand the advancing hosts of Cyrus. A Pan-Ionian Congress which was finally convened to consider the emergency turned a deaf ear also to the suggestion of another statesman, Bias of Priene, that all the Ionians should desert their hearths *en masse* and seek a new home in the island of Sardinia far in the western seas. But the advice of Bias proved to be not altogether barren, and bore its fruit in two cities when at length the barbarians were actually at their gates and the Persian siege-works began to overtop their walls. Phocæa, on the coast somewhat north of present-day Smyrna, was the first of the Ionian cities to be attacked. Its inhabitants apparently had always been a bold and venturesome lot. According to Herodotus [1] they were the first of the Greeks to give up hugging the shores in little, tubby, cargo boats and to launch swift fifty-oar power ships fit for the high and open seas. In them they undertook long voyages in distant waters, and brought back to the Hellenic world its first acquaintance with the Adriatic, the Tyrrhenian, and the Spanish coasts.

However that may be, the Phocæans at the Persian summons to surrender utilized the truce of a day, which had been granted them for the discussion of terms, in embarking their entire population and setting sail for the neighboring island of Chios. There they thought they might be able to buy land

[1] I, § 162 *et seq.*

and settle. But the Chians refused to receive them. Disheartened at their failure to find a refuge, the more timid and homesick souls went back to such homes as the Persians had left them. The stouter hearts, however,

> ". . . . shook out more sail
> And day and night held on indignantly,"

shaping their course for Alalia in Corsica, where earlier voyagers had already established a Phocæan colony. Here for five years they led a piratical and freebooting existence, a public nuisance to their neighbors by land and by sea. Finally their swift penteconters were raided by a combined Carthaginian and Tyrrhenian fleet. They succeeded in beating up, or rather off, the police, but their victory cost them so dear that they decided to move on. Once more they emigrated *en masse*, this time to Rhegium on the Straits of Messina. Thence they worked their way north along the coast, and in 536 B. C. finally settled to the south of Pæstum and founded Velia or Elea.

Curiously enough, the cradle of an even greater school of philosophy was built as the result of similar action on the part of the only other Ionian city to heed Bias' counsel. The inhabitants of Teos also eluded their besiegers by packing themselves and their belongings aboard ship and sailing away. They voyaged, however, no further than the northern Ægean where on the coast of Thrace they founded Abdera. Here the philosopher Democritus was born whose mechanical and atomic theory of the world is still an inspiration of our scientific thinking.

The Eleatic School, then, which so sharply contradicted the teachings of Heracleitus, was itself the result of an episode in a thoroughly Heracleitan adventure. Indeed, Parmenides, its founder, if he did not actually "come over on the *Mayflower*," as is suggested by Diogenes' statement that he "flourished" about 504 B. C., must at any rate have stood in close succession to the Pilgrim Fathers of the movement. In the dialogue named after him, Plato tells us that accompanied by his pupil Zeno he visited Athens at the age of sixty-five,

"very white with age but well-favored," and was interviewed by Socrates, who at the time was still a youth. If this story be fact and not a bit of dramatic license, Parmenides was born about twenty years after the founding of the city. He came of a rich and distinguished family, and himself attained political eminence. We are told that he drew up a code of laws which the Eleans each year swore to obey. As a philosopher he enjoyed throughout all antiquity a great reputation, and is always mentioned with much respect by Plato and Aristotle.

Apparently Parmenides' interest in philosophy was awakened by the Pythagoreans, by two of whom, the story goes, he was "converted" to the philosophic life. He did not, however, prove a docile pupil to his first masters. It is an open question whether he ever actually followed their religious rule, and it is certain that he soon fell foul of the dualism of their chief philosophic tenet. He could accept as little as Heracleitus the Pythagorean doctrine that the Universe can be resolved into two essentially distinct and opposed Principles, and proclaimed with equal vigor that the World is One. But he found the kind of unity attributed by Heracleitus to Reality as unsatisfactory as the Pythagorean teaching of two Principles. To him the doctrine of the identity of opposites, and the assertion that what is one and the same may be at the same time many and different, seemed as contrary to the law of self-contradiction as it later seemed to Aristotle. "Undiscerning crowds," he exclaims, "who hold that it is and is not the same and not the same, and all things travel in opposite directions."[2] To his mind the Milesians and Xenophanes were on the right track, but they had not pushed their doctrine of the oneness of things to its logical conclusion.

To what extent Xenophanes is directly responsible for Parmenides' revolt from his Pythagorean teachers and for the further shaping of his thought is a mooted point. By some it is thought that he settled at Elea, made a disciple of Parmenides, and handed on to him the leadership of the School.[3] Others, however, criticize this view on the ground

[2] Fr. 6 (trans. Burnet, *Early Greek Philosophy,* 3rd ed., p. 174).

[3] *Cf.* Zeller, *Pre-Socratic Philosophy,* I, pp. 555 *et seq.*

that Xenophanes was always a wanderer, and that there is no evidence that he ever even visited Elea. From this point of view his influence on Parmenides would have been either indirect, through hearsay, or the result of a chance and passing contact.[4] Even Parmenides' choice of verse rather than prose as a vehicle for the expression of his philosophy may be due to the example not so much of Xenophanes as of Hesiod and the Orphic literature.

Parmenides himself has perhaps given us in the introductory lines of his poem a figurative account of his apostasy from Pythagoreanism and perception of the truth as set forth in his own system. He was, he tells us, translated in a chariot from the realms of Night to those of Day. There he was ushered into the presence of a goddess who recited to him, in verses which constitute the main portion of his work, both the truth about the Universe and the false opinion of mortals "in which is no true belief at all." [5]

"The Way of Opinion" is a dualistic theory obviously of Pythagorean inspiration. The origin of all things is assigned to the interaction of the two opposed Principles of Light and Darkness. The Universe itself is described as a series of rings, somewhat like those of Anaximander. The outer, which walls in the Universe, and the inner, which is the earth, are dark and solid. Between them is a circle of brightness—the luminous heaven or atmosphere. Intermediate rings — cores of fire encased in dark—intervene between these circles. Between the earth and the heavens sits a Goddess called by later commentators, "Justice," the "Key-Bearer," or Necessity. She is the mother of all the other Gods, of whom Love is the first-born.[6]

The suggestion has been made that the "Way of Opinion" is meant by Parmenides as an account or sample of his earlier Pythagorean beliefs, which he later recanted and came to

[4] For a discussion of this point *cf.* Burnet, *Early Greek Philosophy,* 3rd ed., pp. 193 *et seq.*

[5] Fr. 1. Burnet, *Early Greek Philosophy,* 3rd ed., p. 172.

[6] *Cf.* Burnet, *Early Greek Philosophy,* 3rd ed., p. 177. Also his *Greek Philosophy, Thales to Plato,* pp. 65-66.

regard as wholly erroneous.[7] It is only fair to say, however, that other interpretations have been put forth. Parmenides, it has been held, is not regaling us with an account of the errors of his philosophic youth of which he has repented. He is rather expounding a cosmology, or theory of the structure of the surface world of phenomena, which he means to have taken seriously. That this should follow and seem to supplement a "Way of Truth" in which a quite different doctrine regarding the nature of the Reality underlying phenomena is set forth, need not perplex us. Similarly, the modern philosopher Kant in one breath expounded a carefully reasoned "Universal Natural History and Theory of the Heavens," and in the next criticized reason as incapable of grasping Reality and declared things in themselves to be unknowable.[8] So, too, Herbert Spencer, after demonstrating to his own satisfaction that the Power behind phenomena is inscrutable, devoted volumes to the elaboration of a theory of the principles by which phenomena are governed.

Or again, it may be that we are dealing with something analogous to the doctrine of the "two-fold Truth," by which the philosophers of the Renaissance, sought to square themselves with an inquisitorial Church. Any conclusion of theirs which conflicted with Christian dogma was, they declared, simply the logical conclusion to which mere reasoning unaided by revelation must come. In the same way, Parmenides may be describing the opinions at which any train of philosophic thought unguided by his reasoning will naturally arrive.

But whether he meant the "Way of Opinion" as a recantation of former error, a serious account of the external appearance and behavior of things, or an example of the results of unaided, vulgar philosophy, it occupies in any case a secondary place in his system. He concerns himself with it only after he has already reached his real position by the "Way of Truth."

In the "Way of Truth" Parmenides follows up the implica-

[7] Burnet, *Early Greek Philosophy,* 3rd ed., pp. 171, 184. Also *Greek Philosophy,* I, pp. 65-66.

[8] *Cf.* Gomperz *Griechische Denker,* I, 2, ii, § 5. *Cf.* Burnet on this view. *Early Greek Philosophy,* 3rd ed., pp. 182 *et seq.*

tions which, to his mind, lie clear and unescapable in the statement that a thing *exists*. He begins by setting up as a compass a standard employed as a matter of course by his predecessors although never explicitly proclaimed by them. Logical reasoning is the only method of discovering and testing what exists. The unthinkable cannot be. Any evidence of the senses, however direct, which fails to pass the cross-examination of reason must be rejected so far as the determination of the real nature of the Universe is concerned.

Now, what are the results of a rigorous application of this rule in working out the consequences of asserting the *existence* of anything? In the first place, there can be no such thing as nothing. Mere vacuity, sheer emptiness cannot exist. For it is impossible to think or discourse about absolutely nothing —the evidence of the senses sometimes notwithstanding. Thought and speech have to be about something, however vague. Again, and here Parmenides as we have already noted is apparently paying his respects to Heracleitus, it is equally impossible to think that anything which exists "is and is not the same and not the same." To assert the identity of opposites is to flout the logical law of self-contradiction. Whatever is, simply *is*, full blown and without reserve. It is what is, and nothing else. Existence as such has no degrees or variety.

These, however, are by no means the only restrictions laid by logic upon what can exist. A further analysis of the implications of the verb "to be" leads to truly startling conclusions. We are accustomed to regard the everyday world, packed with variety and movement, birth and growth and death, change and transformation, as something very real and substantial. Nevertheless, says Parmenides, if we will only reflect and use our reasons, we shall be forced to conclude that this world can have no real existence at all. Consider, for example, the seeming generation and dissolution, change and decay which are always going on about us. The things which come and go in the round of birth and death cannot be created out of nothing or dissolved into nothing, since there is no such

thing as nothing. We recognize this readily enough, as it is the equivalent of our modern doctrine of the indestructibility of matter. The appearance upon the scene of a new object does not increase the amount of substance and energy in existence. It is simply a remolding of old stuff already there. Similarly, the seeming destruction of an object does not decrease the sum of matter by so much as an atom. The combination is broken up and the particles are dispersed—that is all.

But, Parmenides goes on, examine more carefully this so-called process of remolding and breaking up. It cannot mean a real coming into or passing out of existence. Upon that point we agreed in the last paragraph. But if it does not mean a real coming into or going out of being, how can generation and dissolution, birth and death be a real process? For existence must come out of existence, that is, out of itself; and being will pass away into being, in other words into itself. Again, in any seeming change what exists merely turns into what exists. But can we say that a thing is really transformed, or takes on a new form, if it has really turned only into itself? On the contrary, whatever the appearance may be, it has really remained itself. Or to put it mathematically, we might say that every case of seeming change resolves itself, if logically analyzed, into an identical equation. *A* does not really become *b*, it simply continues throughout to equal *a*.

Birth and death then, growth and decay, transformation and alteration, change in all its phases, do not touch Reality. They go on without increasing or decreasing the amount of what exists, without affecting the meaning of the verb "to be," without altering the nature or definition of Being. In other words, they do not go on *in Reality*. They merely go on in our false opinion, and deluded senses. They are illusions.

Again, time, the twin-brother of change, cannot be logically regarded as real. We have no business to speak of what was, since that implies that something no longer is, or in other words, has gone out of existence. It is equally impossible to speak of what will be, since that implies that something is not

as yet, but will come into existence. What exists *is* simply now, here, all at once.[9]

With the idea of change, the idea of variety is also banished from Reality. The definition of existence, the nature of Being, is the same in every object. Hence, all objects so far as they exist and are real are the same. Reality is homogeneous and undifferentiated through and through. Nor can what really exists be thought of as spatially divided into a multiplicity of parts and points, moving about in space, as the Pythagoreans had supposed. For what is to separate these parts or points? There cannot be nothing between them, since nothing does not exist. But if there is something between them, then "what is, is in contact with what is," [10] and the being of this something and the being of the things which it is supposed to separate are not divided, but are fused and merged with one another in one continuous, unbroken mass of Being. This absolute fullness, compactness, and continuity of what exists left, in Parmenides' opinion, no room for any change of place or movement whatsoever within the sphere of Being. Nor could Reality as a whole move, since outside it there is not even nothing for it to move in.

We may speak literally of the sphere of Being, since Parmenides does not deny spatial extension and solidity to what exists, but asserts that it is shaped like a ball. Reality is for him a globe of absolutely solid, continuous, homogeneous, transparent stuff, wholly devoid of cracks and flaws or iridescent play of qualities. And we might represent the dream world of our experience, of variety and multiplicity, change and motion, as an optical illusion we have of something flickering and stirring and reflecting rainbow lights in its rigid, colorless, and motionless depths.

The reasons brought forward for supposing Reality to be a sphere, are that roundness is logically implied in its undifferentiated and even character, which permits of no "more or less or greater or smaller," or deformation or lack of equidistance

[9] Fr. 8, l. 4, Burnet, *Early Greek Philosophy,* 3rd ed., p. 174.
[10] Fr. 8, l. 26, Burnet, *op. cit.,* p. 175.

from the center. Nor is there anything outside it to "keep it from reaching out equally." [11] But considerations other than scientific may have helped determine this description of Reality. The symmetry of the sphere made it to the Greek eye the very "mold of form." As the *beau idéal* of all geometrical figures, its best and most beautiful shape was the "natural" and proper shape for complete and perfect Being. Later on, we shall also find Plato conceiving the Universe as a sphere, for the express reason that this figure is excellent above all others and therefore the only fitting form for a world created in the image of the Good.[12]

Our first impression, indeed, is that these æsthetic and quasi-moral considerations outweighed science and logic in Parmenides' mind, and that his doctrine of Reality as a sphere is a curious twist in his philosophy, for which at any rate no modern scientific justification can be found. His disciple Melissus, as we shall presently see, could not accept a curved Reality and endeavored to set things straight again by teaching that "what is" stretches out to infinity in every direction. We are inclined to approve the correction and to ask how it is possible to conceive a sphere bounded even by nothing, with no extension outside its periphery. There must be, it would seem, a convex as well as a concave side to its curvature.

But quite apart from the fact that, as Parmenides' pupil Zeno showed, it proves equally difficult to conceive space as infinitely extended, modern science has given us another warning to look before we leap too hastily to a conclusion. It is one of the revenges of the whirligig of time that the most recent developments of mathematics and physics should suggest that after all Parmenides may be right. According to the Einstein and other cognate theories, Reality in its spatial aspects actually is a self-contained sphere, or at any rate, curved.[13]

[11] Fr. 8, l. 43 *seq.* Burnet, *op. cit.*, p. 176.

[12] Plato, *Timæus.* 33b.

[13] *Cf.* Einstein, *Relativity, the Special and General Theory,* p. 108 *et seq.* For a discussion of non-Euclidian geometrics and the most recent developments of physics, *cf.* Eddington, *Space, Time, and Gravitation,* particularly Chapters V and X and the Historical Note. Appendix, p. 210. It should be noted that in Einstein's theory the sphere of closed and self-contained

All so-called straight lines and flat surfaces are really slightly curved and if sufficiently projected would in the long run return upon themselves. Our solar system, however, is so small a fraction of this spherical whole that we are unable to detect the curvature.[14] Hence, straight lines and flat surfaces give us a false opinion of extension as something which enables us to proceed indefinitely in any direction away from any given point without ever coming back to it. Similarly, the lost traveler who is in reality wandering in a circle on the surface of a vast plain calls his course a straight line and feels positively that he is not returning upon his tracks. Or again, the globe-trotter going round the world has no perception of the curvature of the earth (save perhaps at sea on a calm day) and, if unsophisticated, could scarcely be brought to believe without the experimental verification of homecoming, that as he proceeded in a straight line over a flat surface away from his front gate he was in reality always approaching his back door.

Submitted and habituated as we are, then, to thinking of the whole of space in terms of the false perspective afforded by our perception of an infinitesimal fraction of extension, our provincialism makes us cling obstinately to the view that straight lines do not return to their starting point. This in its turn gives us a prejudiced and incorrect notion of the meaning of such terms as "outside of" and "beyond," and leads us to the inadequate and unsophisticated concept of space as necessarily infinite in three dimensions.

Let us now sum up Parmenides' theory in his own words. That which exists, he says, must be thought of as a sphere "uncreated and indestructible; . . . complete, immovable, and

space is infinitely extended in both directions in time. His Universe then is really "cylindrical—curved in the three space dimensions and straight in the time dimension." (Eddington, p. 161.)

[14] Crude estimates of the size of the spatial sphere on Einstein's hypotheses suggest that it would take a ray of light 1,000 million years to "go round the world" and return to its starting point. (Eddington, p. 161.) If the sphere, however, were throughout of the density of water, its radius would be 570 million kilometers, or could be traversed by light in about half an hour. (Eddington, p. 148.)

without end . . .[15] coming into being and passing away, being and not being, change of place and alteration of bright color . . . are but names which mortals have given, believing them to be true."[16]

What the Stuff is that composes this globe of Reality, Parmenides does not further specify. But there is no need of his doing so, since his argument is equally applicable to all theories which suppose Reality to be absolutely one and simple in character, whatever that character may be. If for example, Thales be right and all things be really Water, then no thing except water really exists. All the so-called different things will be really the same thing, *i.e.*, Water. All the seeming changes of water will leave water itself the same water, in reality unchanged. And since water fills existence to the brim and is hermetically sealed within it, as it were, there exists no room for any drop of water to move or change its place.

In other words, the suspicion which overtook us early in the last chapter now deepens into a certainty. The senses actually are juggling with us when they proceed to fish red bandana handkerchiefs, glasses of beer, white rabbits, canary birds, and all the rest of the infinite complexity and variety of the world out of a cosmic top-hat filled with nothing but pure water or air. None of these transformations really occur, none of this variety really is. Time, Change, the Many, are tricks which the senses play us. But reason sees through them and knows that in Reality nothing ever occurs or changes, or begins or ends.

Cold, abstract, and difficult as the argument and conclusions of Parmenides are, they, no less than the warm and vivid teaching of Heracleitus, can stir the imagination and enlist in their behalf a passionate volunteer support of temperamental preference. For we are either bored or pacified by Rest as we are either sickened or exhilarated by Motion, and it touches the quest not only of truth but of happiness to know whether Life be really forever tossed upon the Flux and driven before the gale, or in reality lie becalmed upon the

[15] Fr. 8. ll. 2-3, Burnet, *Early Greek Philosophy*, 3rd ed., p. 176.
[16] Fr. 8. ll. 39-43 *loc. cit.*

surface of an Existence so still that the merest semblance of a ripple is sheerest fancy. The conflict between Parmenides and Heracleitus at which we have just been assisting is then no academic difference of opinion. When Heracleitus makes Motion and Chance the essence of Reality he has with him all the restlessness and love of adventure in man, all the lure of sea-horizons and the challenge flung over the crests of the secretive hills. And the Eleatic doctrine that in Reality there is neither any variableness nor shadow of turning, and that all the fret and hurry of things is mere false opinion, and all our noisy years but "moments in the being of the eternal Silence," also expresses not simply a logical conviction but voices the great longing for peace and rest, for port and still waters and furled sails, which contends with restlessness for the mastery of the soul.

Indeed, it has been maintained that Parmenides drew his inspiration largely from the mystical side of Greek religion, and that even the Way of Truth and the doctrine of the One Reality set out from a Pythagorean and Orphic starting point and led to mystical conclusions. The One Substance, it is said, is but the Pythagorean unit of which the whole number series is composed, deprived of its power to generate the many. The Way of Opinion depicts a process similar to the fall of the soul from absorption in the divine essence of Dionysus into the darkness and tribulation, the struggle and the suffering, of the body and the senses. For this straying of the soul from truth along the Way of Opinion the perfection of Reality cannot account. So, too, according to this interpretation, the return to Reality by the Way of Truth is for Parmenides really a mystical salvation, like the reunion of the purified and enlightened soul with Dionysus.[17] But we are here treading on difficult and contentious ground, which we shall do well to content ourselves with skirting.

Parmenides' failure to specify the nature of that which exists has left room also for various less mystical conjectures regarding his views. It is maintained, for example, that he conceived Reality as something immaterial and highly

[17] *Cf.* Cornford, *From Religion to Philosophy*, pp. 214-224.

abstract,[18] or again that he anticipated the modern philosopher Spinoza by first sharply distinguishing consciousness from the material world, and then proclaiming the essential identity of thought and its material object as two aspects of one and the same Being.[19] Another interpretation, seemingly less strained and more in accord with both Parmenides' own words and the philosophic concepts of the times, suggests that he thought of Reality "as something quite as solid and substantial as Water or Air, and that he, no more than the Milesians, drew any hard and fast line between the living and thinking, and the material and extended, aspects of the world.[20] His solid sphere of Being, like Xenophanes' God probably "sees all over, thinks all over, and hears all over" with a diffuse protoplasmic sensitization, as it were, rather than with a mind collected and isolated in a principle separate from and opposed to bodily Reality.

It may be, even, that Parmenides gave a very concrete and corporeal twist to the abstract form of his reasoning and to such assertions as that of the non-existence of nothing. He was, it has been said, merely refusing to distinguish between the solid and the spatial aspects of the Universe and to admit the existence of empty space. In particular he was attacking the Pythagorean dualism which conceived the world as a porous mass of the Limited, or as he calls it in the "Way of Opinion," of "compact and heavy body," afloat and steeped in the "light, thin" Unlimited.[21]

Perhaps we might also find in his refusal to differentiate space from matter fresh evidence that he had not outgrown the Milesian habit of confusing all kinds of existence in a blended World-Substance tasting equally everywhere of all its flavors. "What is" not only "thinks all over." It is whatever it is "all over" and through and through. If it is solid, it is equally solid everywhere throughout its entire extent.

[18] *Cf.* Deussen, *Philosophie der Griechen,* p. 83, § 3.

[19] *Cf.* Gomperz, *Griechische Denker,* I, 2, ii, § 4.

[20] *Cf.* Zeller, *Pre-Socratic Philosophy,* pp. 589-90; Burnet, *Early Greek Philosophy,* 3rd ed., pp. 178 *et seq.* Also *Greek Philosophy, Thales to Plato,* p. 68.

[21] *Cf.* Burnet, *Early Greek Philosophy,* 3rd ed., pp. 186-7.

Solidity and being are one just as thought and being are one. Space as little as thought can be separated from body and opposed to it.

In his attempt to confirm with his logic this habit of viewing the Universe *en bloc*, Parmenides brings out some of the difficulties inherent in the idea of a vacuum, and of the relations of matter to space, by which the physical sciences are still balked. Thus in the Seventeenth Century, Descartes, who was one of the founders of modern science, joined hands with him in asserting that there can be no such thing as nothing or emptiness; that a true vacuum is impossible, since "two bodies must touch each other when there is nothing between them";[22] and hence that material substance must be absolutely compact, continuous, and coterminous and identical with extension. But the Eleatic would not have admitted the success of Descartes' attempt to imbue a substance so conceived with motion and to divide it into a multiplicity of material bodies.

Again, Parmenides might have remarked the perplexities which beset our most modern scientific theories. Driven by the difficulties of conceiving of action at a distance without some intervening medium to carry the impulse, science has packed all interstellar space solid with a continuous, omnipresent, Eleatic ether, of which the grosser forms of matter are regarded as nodules, and through which the waves of light, heat, electrical energy, and perhaps gravitation are supposed to be transmitted. But in so doing physics has created for itself the unsolved problem of explaining how the heavenly bodies can push their way and change their place without friction in this dense Parmenidean substance, or how any differentiation of the elements can occur within its homogeneous, unbroken depths. The questions raised by Parmenides are, then, not outworn and dead. They still press for an answer, and if we cling to the view that Reality is all cut of the same cloth and is in all respects One, his is perhaps the only answer that can logically be given them.[23]

[22] *Principia*, II, 18.

[23] *Cf.* Burnet, *Early Greek Philosophy*, 3rd ed., pp. 179 *et seq.*

The modern philosopher, however, unlike Parmenides, is also plagued by the necessity of explaining away the appearance of multiplicity and variety, of time, of "coming into being and passing away . . . of change of place and alteration of bright color" with which the surface of this unrippled stillness and this flawless transparency are overspread. If the materialist be right and life and consciousness and mind be really nothing but mechanical energy, and all the seemingly different forms of that energy be nothing but movements of the ether, why do they seem to be so different from what they really are? If, as the Brahmin says, when Brahma ceases to dream the worlds will pass away, why does Brahma dream at all and dream what is not so? If, as some Buddhists claim, there exists in Reality nothing but the unbroken and dreamless peace of Nirvana, how can there arise or exist even the nightmare illusion of a struggling, suffering world torn asunder into a myriad selves and things? In Realities thus conceived there would seem to be no ground or room for even the appearance, the dream, the illusion of anything else.

So, too, beside the Way of Truth as Parmenides pursued it there should be no room for a Way of Opinion. All that is is the ball of undifferentiated, unbroken, unchanging, and immovable World-Substance. In it there can be found no reason for mortals believing Reality to be other than it is, or, for that matter, no reason for the existence of mortals and their opinions at all. Outside it no reason can be sought for, since it is all that is.

That this difficulty is never faced by Parmenides is due to the nebulous character of his distinction between Appearance and Reality. The distinction and the problem which it involves occurs to him as little as it did to Heracleitus. He, like the latter, differentiates between the senses and reason, and perhaps advances upon him in that he explicitly contrasts the fallibility of perception with the corrective function of reason and the reliability of correct thinking. We are probably entitled in his case to anticipate the distinction between "rationalism" and "empiricism," and dub him a rationalist. But we ought to do so in all caution. He may insist that only

the results of thinking are to be accepted as true, whatever the senses may protest; but he never asks what it means to have a false opinion, or why false opinions occur, much less how they can occur. In a word, neither error nor knowledge presents any *problem* to him. But until the problem of error and of knowledge is recognized and pondered, the terms "rationalist" and "empiricist" have but a vague application, and the distinction between Appearance and Reality remains without philosophic weight.

As it is, Parmenides, having once noted the untrustworthiness of the Way of Opinion and jotted down the kind of view to which it leads, dismisses it from his mind and system. He is concerned with Truth, not with the "names which mortals have given—believing them to be true," and it does not seem to enter his mind that a true account of Reality must include and explain these wrong names and erroneous beliefs applied to and held regarding it. In his eagerness to scale the Way of Truth he fails to look behind him, forgetful that it, too, is an untrustworthy path which thought cannot traverse in both directions, and oblivious to the perils of a logic that reasons out a Nature of Things in which no reason for things can be found. It is, however, only just to remember that the whole history of philosophy is plaintive with the mewings of metaphysicians who have found it easier to get up the tree of knowledge than to get down again. Parmenides is by no means the last thinker to prove a view of the world in which the world proves not to be seen.

But although Parmenides is treed by his argument, and only its collapse can bring him down to earth again, the mere fact that he argues and proves at all marks a great step forward in the development of philosophy. Previous philosophers, as we have already observed, must, to be sure, have used logical methods in their thinking and found logical reasons for their conclusions regarding the real substance of the world. The Milesians, the Pythagoreans, and Heracleitus did not work out their views innocent of logical procedure and of the difference between good reasons and bad ones. They must even have implicitly assumed that what cannot be thought cannot

exist, and that the more thinkable hypothesis is the more tenable. But they had reasoned out their systems in privacy and silence and published only their conclusions, and these in a dogmatic and often obscure form. They do not show why they are right, or why others of whom they speak slightingly are wrong. Parmenides, on the contrary, does his thinking out loud and in public, and not only announces to all the world his conclusions but confides to everyone the whole process of reasoning by which he reaches them. He tells you not merely *that* you are a fool, but *why* you are a fool if you do not agree with him. In a word, he demonstrates his theory. Thus, incidentally to the exposition of his hypothesis regarding the characteristics of the World-Substance, he also lays bare the mechanism and method of sound thinking and discloses some of the tests for determining the superiority of one hypothesis over another.

Just, then, as in Heracleitus we perceived quite plainly ethics and psychology in bud upon the parent stem of philosophy, so in Parmenides we may see the special subject-matter and science of logic assuming a distinct and recognizable form. In his pupil Zeno, as we shall find in a moment, the bud flowers into a special form of argumentation, called by the Greek "dialectic," which is employed by Socrates and Plato. We may not, however, call Parmenides the father of logic since, as we have already noted, some degree of formal reasoning is the Siamese-twin of any articulate thought. But we are entitled to believe that we are assisting if not at the Nativity, at least at the Epiphany, of methodical thinking.

Parmenides' contribution, however, is not limited to his public-spirited gift of open and reasoned argument. Philosophy is also the richer for his conclusions, extreme as they are. His view of the nature of Reality is, as we have pointed out, essentially Milesian. But seen in the dry light of his generalizations and abstract reasoning the real profundities as well as the dangerous shallows of the Milesian doctrine become evident. For example Thales, Anaximenes, and Anaximander, and for that matter Xenophanes and Heracleitus, had all assumed that the World-Substance, be it Water, Fire, Air,

or what not, is neither increased nor diminished in amount by the changes which it undergoes. In Parmenides' hands this assumption matures into an explicit statement and a logical demonstration which anticipates the scentific teaching of to-day that the sum total of matter and energy in existence is a constant and not a variable quantity. Again the Milesian feeling that the World-Stuff preserves its original qualities intact in the midst of its transformations, inconsistent as such a feeling is with a belief in the reality of change, is justified by the Eleatic in an argument for the qualitative sameness of Reality, which is prophetic of the modern hypothesis that chemistry can be understood in terms of physics, and the various chemical elements reduced to a single homogeneous matter, like the ether for example.[24]

Finally, the severity of Parmenides' conclusion that since Reality is invariable and constant both in quality and quantity, therefore motion, change, multiplicity, and variety are logically unthinkable and hence non-existent, was both a warning and a stimulus to speculation. Philosophy had reached for the moment a dead center, and had to be set in motion again, either by ousting thought with the eccentricities of mystical emotion and feeling or by restoring to reason its momentum. The moment, however, was not ripe for philosophic mysticism, which presupposes an exhaustion of reason as a means of reaching truth, and an impatience and despair of its incomplete and self-contradictory results. Logic had just become conscious of itself and, far from being jaded, was over-eager and confident. The self-stultification of Parmenides' reasoning was no evidence of final failure and disgrace, or cause for permanent discouragement. It showed no more than an incomplete acquaintance with the complexity of the world, and taught a lesson calculated to steady thinking and set it on the path of real advance. It emphasized the necessity of a further analysis on the one hand of the nature and validity of logic and knowledge, and on the other of the structure of the physical world, before leaping too hastily to logical conclusions. As a matter of fact, we shall find before long

[24] *Cf.* Gomperz, *Griechische Denker,* 1, 2, ii, § 3

the interest of philosophy centered upon the problem of knowledge, and focused in a brilliant and searching skepticism as to the existence of any absolute and universal truths. And in the next chapter we shall trace successive steps in so reconstructing the physical universe that the reality of multiplicity, motion, and change can be reasserted and reconciled with the Parmenidean—and modern scientific—doctrine that the World-Substance is constant and invariable both in quantity and quality.

The disciples of Parmenides, nevertheless, persisted in regarding the appearance of multiplicity and variety and the trick of transformation and motion as all "hypnotism," so to speak, and false opinion, and refused to admit the possibility of any "scientific" explanation. They found, however, that the Pythagoreanism against which they were revolting was by no means scotched by their master's logic. On the contrary, it was very much alive, and evinced a tendency to shed its old skin of religious mysticism and emerge with more brilliantly marked mathematical and scientific characteristics. Moreover, in the coils of its dualism the Eleatic solid sphere of pure unbroken Existence was being slowly crushed to bits before their eyes and dispersed throughout a specious space which was self-confessedly no thing. That unthinkable absurdity, the existence of a vacuum, was being reasserted, and the immutable World-Substance broken up into the four elements of Empedocles and the molecules of Anaxagoras, or pulverized into a dust-storm of swirling atomic, Pythagorean points or units. There was dire need, then, to rearray all the forces of logic for a final onslaught on the philosophic countenance increasingly given to the things which are "but names which mortals have given, believing them to be true—coming into being and passing away, being and not being, change of place and alteration. . . ."[25]

At Parmenides' death the leadership of the School fell to his pupil Zeno, said by some to have been his favorite, by others his adopted son. With it devolved the task of defending the

[25] Parmenides, Fr. 8. l. 39, Burnet, *Early Greek Philosophy*, 3rd ed., p. 176.

master's doctrines. We have already run across Zeno in the company of Parmenides at the time of the visit to Athens mentioned by Plato. He is portrayed as some twenty-five years younger, "tall and fair to look upon." Like Parmenides, he seems to have started his philosophic career as a Pythagorean and like him also, to have played an eminent and honorable part in Elean politics. The story goes that having been arrested and brought before the tyrant of the city on the charge of conspiracy, he made the pretext of wishing to whisper information in private an occasion for biting the royal ear and holding on till the tyrant was stabbed by other conspirators. Another version of the story, to which the narrator gives more credence, relates that by biting out his own tongue he shamed the bystanders into stoning the tyrant to death.[26]

But even if the story be true, and his zeal for political liberty eventually precluded him from reading aloud his discourses and defending Parmenides' doctrines by word of mouth, as he did during his sojourn at Athens, he seems to have used his pen to good advantage. His writings have been lost, but a portion at least of their substance has been reported by other ancient philosophers. So much as has come down to us is a reiteration of the already familiar thesis that multiplicity and motion are unthinkable and hence unreal.

In his manner of dealing with the subject, however, Zeno differs from Parmenides. The latter had argued directly that if we analyze what we mean when we assert that a thing *is*, we shall find, if our reasoning be close and correct, that we mean that it cannot move, change, or be divided into or composed of many parts. Zeno, on the contrary, begins by conceding the reality of the Many, of Space, and of Motion, and then shows that the self-contradictions and absurdities which follow on the concession are far greater than those involved in the denial of their existence. This particular method of reasoning by admitting for the moment the truth of an opponent's view and then exposing the contradictions of thought to which its truth commits him, was called by the Greeks "dialectic." It was later made famous by Socrates and was perfected by the

[26] Diogenes Laertius, IX, 26 *et seq.*

genius of Plato, not only as a fashion of argument but as a style for literary and artistic expression. Zeno is regarded by Aristotle [27] as its inventor, although, as we have already seen, he probably owes his inspiration to Parmenides' more general formulation of logic.

Let us now see how this method is exemplified in his handling of the objections raised, perhaps by Pythagorean contemporaries, against Parmenides' views on multiplicity, space, and motion. Take first the case of the Many *vs.* the One. Suppose, Zeno says, that the world is not the unbroken continuous Sphere which Parmenides thought it to be, but is really an aggregate of many constituent parts. If Reality is made up of parts, it must obviously be made up of a definite number of them. This is only common-sense. But common-sense just as obviously demands that every part, however small, shall be divisible into still smaller parts, and that this process of subdivision shall continue indefinitely or *ad infinitum.* The statement, then, that Reality is a Many involves with equal logic the contradictory assertions that the Many must be finite, and that they must be infinite, in number. It is even more difficult to swallow such a contradiction than to stomach Parmenides' doctrine that plurality is false opinion and that the Universe is a single, indivisible Substance.

If Reality is a Many and therefore composed of a certain number of units, this final definite number must be incapable of extension by further subdivision. But only that which has no magnitude can be thought of as indivisible. Hence these units will have no magnitude. Reality, then, being made up of parts which have no magnitude, will have no magnitude itself, or in other words will be infinitely small. Suppose, however, the other alternative that the units which compose Reality are divisible *ad infinitum.* In that case Being will be composed of an infinite number of parts. But that which has an infinite number of parts is infinitely large. Reality, therefore, will be infinitely large, as well as infinitely small. Once more, the Many prove even more difficult of mental digestion than the Parmenidean One.

[27] Diogenes Laertius, IX, 25.

Finally, if Reality is not essentially One, but a mere aggregate of the Many, the effect produced by the sum total of many units ought to be no more than the sum of the effects produced by each separately. Take, however, a measure of millet seed. Drop the ten thousandth part of a grain, or even a whole grain, and it will make no noise. Drop the whole measure and there will be a noise. But how can a noise be a sum of silences and the audible be composed of that which cannot be heard? If, then, the whole is nothing but an aggregate of parts, and "the measure of millet makes a noise," the one "grain and the ten-thousandth part of a grain make a noise" [28] and are audible, too—which is contrary to fact.

Having disposed of the view that Reality is a Many by showing that it involves more self-contradictions than the Parmenidean hypothesis that Being is One, Zeno turns to defend the teaching that Reality is a sphere outside of which there is no empty space. The difficulties of twisting our minds to the modern presentation of this view, we have already noted. Apparently the Pythagorean mathematicians, also, had immediately objected that a sphere with no space outside to bound and shape it was unthinkable. However, says Zeno, suppose that such a space exists. If it exists, "it will be in something; for all that is, is in something, and what is in something is in space." And this space in which the space containing the Parmenidean sphere of Being is placed, must itself be placed and contained in still another space. "This goes on *ad infinitum*. Therefore there is no space" [29] in the sense of a final something in which all things are placed and contained but which itself can be conceived as contained and placed in nothing outside itself. The dilemma is absolute. We must stop somewhere or nowhere. But if we are going to stop anywhere, we might just as well have stopped in the beginning with the Eleatic self-contained sphere of Existence, outside of which no extension exists. For in any case we shall be conceiving

[28] Simplicius 255 r. (trans. Fairbanks, *The First Philosophers of Greece,* p. 117).

[29] Simplicius, p. 562, 3 (trans. Burnet, *Early Greek Philosophy,* 3rd ed., p. 317).

space as eventually self-contained and finite. If, however, we do not stop anywhere, we shall certainly get nowhere and never reach anything which we can properly call the real space inside of which all bodies and extensions are contained. The idea, then, of the infinity of space is not a whit less perplexing and self-contradictory than Parmenides' idea of the bounded and spherical character of extension.

Had Zeno been a prophet, he might have reinforced this negative argument with a positive appeal to the modern mathematical and physical theories which we were discussing a moment ago. But as matters stood, he had shown that even if Parmenides were wrong, his critics were no nearer right. Indeed the twin yet incompatible necessities of conceiving space as both infinite and finite, and the seeming impossibility of conceiving them as either, led the modern philosopher Kant to reject the reality of space altogether and regard it as a wholly subjective form of human perception.

We pass now to the question of motion. Granting for the moment that motion is real, what will be the consequences of its reality? Take these two examples: Swift Achilles in pursuit of the lumbering tortoise, and the still swifter arrow flying through the air. Achilles surely seems to catch the tortoise, and apparently the arrow moves. But consider the real situation. To catch the tortoise Achilles must certainly first traverse half the space which separates him from the object of his pursuit, and then half the remaining space, and yet again half that which still intervenes. Now look closer. Achilles though always "winning near the goal" can never reach it, for he will always be separated from it by half a distance still to go. This distance may in the end be infinitesimal, but it is still real and will always intervene. Nay, more, the tortoise would be just as safe from Achilles' advance if it never moved but stood waiting for him, since a fixed limit by the same reasoning is just as inaccessible as a moving one. Motion, then, logically cannot take place. It is not thinkable. Parmenides' assertion that it is an illusion is less absurd than the belief in its reality.

Or, take again the arrow flying in the air. Obviously, it

would seem, the arrow is always somewhere. But how can we say that it is somewhere if it is moving? If it is moving it will be always between "wheres," on its way from one point to another. To think of it as really at one point or anywhere we must think of it as at rest. Its so-called flight, then, turns out on analysis to be made up of a series of contiguous points at which it cannot be conceived as flying. A movement, however, which is nothing but a sum of stops is self-contradictory and impossible. Much the easiest way out of these difficulties is, after all, to agree with Parmenides that motion is unreal.

But apparently, Zeno's opponents had their answer ready and retorted that at any given indivisible instant of time the arrow need not be regarded as at rest but could be conceived as moving and on its way from one point in space to the next. At any rate, Zeno is prepared to answer an objection of this sort. Take, he says, "equal bodies moving in opposite directions past each other in the stadium at equal speeds." [30] To be more specific and at the same time to modernize an argument whose difficulties are not obviated by the explanations of the ancient commentators, we may suppose these bodies to be two motor-cars of equal wheel-base moving along a road in opposite directions, each making say fifty miles an hour. Since their velocities are equal they will travel equal distances, as for example their own lengths, in equal times. Moreover, they will approach and pass each other at a speed equal to their combined velocities, or at a rate of one hundred miles an hour. In other words, either car will pass and clear the length of the other, in one-half the time necessary to cover the same distance on the ground. Furthermore, in any fraction of the moment of passing, however minute, the two cars will still be passing each other at double the speed, that is, in one-half the time, that they are passing over the road. So far so good.

But now Parmenides' critics had argued that the ultimate fractions into which time might be divided were indivisible instants, and that in these instants the arrow—or the motor-car —moved from point to point. In that case, it must be possible for the two cars to take half of an indivisible instant to pass a

[30] Aristotle, *Physics,* VI, 9, 239*b*.

fraction of each other's lengths and the whole of it to traverse a like amount of stationary ground. But it is by definition impossible to take half of an indivisible instant. It cannot be halved, since there is no time less than it. In such an instant, therefore, despite all the evidence of the senses, the two cars cannot be conceived as taking less time to pass some portion of each other's lengths than to go the same distance on the ground. But in that case one hundred miles an hour is really no faster than fifty miles an hour. "Double the time," to quote from Aristotle's account of Zeno, is really "equal to the half." [31]

Such are the difficulties of trying to move in indivisible instants, or in a time composed of them. Half as fast proves to be the same as twice as fast, and the brake and the throttle give identical results. In these circumstances, it is madness to maintain that the motor-car can run—except into fatal absurdities. The reasonable man, anxious to avoid suicide by self-contradiction, will rather heed in time the warnings of logic, submit without protest to arrest by Parmenides, and enter a plea of "*nolo contendere*" to the charge of really standing still while under the false opinion of "speeding." The arrow, too, or any other body intoxicated by the impression of motion, will do well to appear with the motorist at the bar and plead guilty to having mistaken for a successful flight a series of points in each of which it now recognizes itself to have been at rest. By so doing it will escape with a far lighter reprimand from reason than if it persists in the drunken assertion that it was actually moving in an indivisible instant or in a time composed of a series of such instants.

It may seem to us at first as if Zeno overshot his mark, and was too smart and subtle to be really trustworthy in detecting and writing up the paradoxical character of motion. We instinctively feel that it is all too absurd, and that there must be a "joker" somewhere in his argument. This is perfectly true; but it has taken the mathematical world some twenty-two centuries to discover just what the "joker" really

[31] Aristotle, *Physics,* VI, 9, 239*b*. Burnet, *Early Greek Philosophy,* 3rd ed., pp. 319-20.

is, and to give a satisfactory solution of the problems which Zeno raised. To answer his objections, revolutionary methods of dealing with the concepts of the infinitesimal, the infinite, and the continuous have been necessary. The results of this revolution have been to banish the infinitesimal and to redefine infinity and continuum in terms which render the Pythagorean view that everything is a sum or number of discreet units as paradoxical as Zeno had found it.[32]

We may then take leave of Zeno feeling that his arrow, albeit motionless, is a very penetrating criticism of "those who uphold a many" and that it "gives them back as good and better than they gave." If his argument is aimed at showing that his opponents' "assumption of multiplicity will be involved in still more absurdities than the assumption of unity," [33] it hits its mark squarely. Parmenides' position that motion and multiplicity are unreal may be untenable, but an attack on it on the ground that space, time, and the World-Stuff are aggregates of many indivisible mathematical points or parts will be hoist with its own petard long before it reaches its objective.

Parmenides' next greatest defender, Melissus, was recruited overseas from the island of Samos. Like Zeno, of whom he was a somewhat younger contemporary, he was eminent in the politics of his native city, and, as events showed, he could try his hand at the defense of other things than philosophic theories. The consummation of the defeat of the Persians at Salamis by the Greek victories the following year at Platæa and Mycale had been the signal for immediate disaffection and revolt on the part of the Ionian cities whose subjugation by Cyrus we noted at the beginning of this chapter. In this revolt Samos had taken a leading part. The battle of Mycale, in fact, had been precipitated by her offer of alliance to the combined Athenian and Spartan naval forces at Delos, and

[32] For a discussion of Zeno's paradoxes in the light of modern mathematics, *cf.* Russell, *Mysticism and Logic,* Ch. V.

[33] Plato, *Parmenides,* 128*c* (trans. Burnet, *Early Greek Philosophy,* 3rd ed., p. 313).

her appeal to them for help against the Persian fleet of four hundred ships mobilized off her shores. Later, she had been one of the most powerful states to enter along with the other Asiatic and island Greeks into the Confederacy of Delos, which, formed in the beginning under the hegemony of Athens as a defense against further Persian aggression, was transformed through the inevitable ascendency of the leading partner into the Athenian Empire of the Periclean Age.

The former allies, however, now become subordinate if not subject, proved unruly members. Revolts and attempted secessions were frequent, in the most formidable of which Melissus came to the fore. A quarrel arose between the Samos and Miletus over the possession of the same Priene which we have already had occasion to mention in connection with the founding of Elea. The Athenian Government not only intervened but extended its intervention to interference in the domestic affairs of the island. The ruling aristocracy was overthrown and a democratic régime was set up under the protection of an Athenian garrison. The aristocracy, however, came back in force one fine night, seized the garrison and handed it over to the Persians on the mainland, and reëstablished themselves. Pericles, who commanded the Athenians, returned post-haste at the news and invested the town. And, Plutarch tells us, "Melissus was captain of the Samians against Pericles at what time he did lay siege unto the city of Samos." [34] The Athenian statesman's attention, however, was diverted by the rumors of the arrival of a rescuing Phœnician fleet, and leaving a blockading force under command of the poet Sophocles, he went off with a part of his ships to attack the enemy. Then "Melissus, the son of Ithagenes, a great philosopher, being at the time general of the Samians: perceiving that few ships were left behind at the siege of the city, and that the captains also that had the charge of them were no very expert men of war, persuaded his citizens to make a sally upon them. Whereupon they fought a battell and the Samians overcame: the Athenians were taken prisoners, and they sunk many of their

[34] Plutarch, *Themistocles,* Ch. 2 (North's trans.).

ships." [35] The Samian success, however, was short-lived. The Phœnician fleet failed to materialize, Pericles returned, resumed the siege, and after nine months, forced a surrender (439 B. C.). The city was compelled to destroy its fortifications, hand over its fleet, and pay an indemnity. The admiral, we may fancy, returned to his philosophy for refuge and consolation.

Both Parmenides and Zeno, it will be remembered, began their philosophic careers as Pythagoreans and delivered their most telling shafts against their former masters. Melissus, however, seems to have done his first philosophizing under the influence of the Milesians and Heracleitus,[36] and in his writings has principally in mind a reformation, or when that was not possible, a refutation, of Ionian doctrines by Eleatic logic. In his use of argument he abandons the "dialectical" method introduced by Zeno, and returns to the direct reasoning, though not to the poetical form, employed by Parmenides. At the same time, he is not, like Zeno, wholeheartedly devoted to his master but differs from him, as we shall see in a moment, in two important points.

Melissus begins by reiterating the Parmenidean dictum that nothing cannot exist since it cannot be talked about "as of something real." [37] From this initial statement he deduces the twin conclusions that since emptiness is nothing [38] empty time and empty space cannot exist. Reality, then, cannot be preceded or followed by empty time, or bounded by empty space. Hence it must be conceived as unlimited in both duration and extent.[39]

In this doctrine of the infinity of Reality in space and time, Melissus modifies very considerably the teaching of Parmenides. The latter, it will be remembered, had logically enough relegated time along with its sister notions of change and motion to the realm of false opinion. "What is" simply is.

[35] Plutarch, *Pericles,* Ch. 26 (North's trans.).

[36] Burnet, *Early Greek Philosophy,* 3rd ed., p. 321. Zeller, *Pre-Socratic Philosophy,* I, p. 628, note 1.

[37] Fr. 1*a,* Burnet, *loc. cit.*

[38] Fr. 7, Burnet, *op. cit.,* p. 323.

[39] Fr. 1, 2, 3, Burnet, *Early Greek Philosophy,* 3rd ed., pp. 321-2.

The past and future have no true existence. Melissus, however, seems to take the reality of time for granted, although he is as stern as Parmenides in proclaiming the unreality of everything which happens in its course.

This view is less profound and consistent than that of Parmenides. Time, apart from the march of events whose occurrence and novelty it marks and measures, is like the Smile without the Cheshire Cat. If the mobile features of the world must fade into unreality and illusion, time should disappear with them. Melissus, however, had less sense of metaphysical propriety than Alice. She, at least, thought it odd that the Cat should fade and leave her alone with the Smile. But he exhibits no surprise at seeing Time still there without the change and motion upon whose face it ordinarily plays. Nor does he wonder that it should still be really going on, although everything which seems to go on in it is really at a standstill, and "going on" itself has proved to be a false opinion.

In his teaching that Reality is infinite in extent, Melissus disagrees with Parmenides' view that it is an all inclusive, self-contained sphere. This modification of the older Eleatic doctrine is perhaps due in part to the lingering influence of his early masters. The Milesians had all assumed that the World-Stuff is boundless and Anaximander had merely called it the Boundless or Unlimited, and let it go at that. In part, too, Melissus was probably influenced by the same difficulties of conceiving a sphere with nothing, not even empty space, outside it, which make it so hard for us to-day to grasp the Einstein theory. There would seem to be no end to extension, and since all extension in Melissus' opinion was packed full of World-Stuff, Reality must stretch away to infinity in every direction.

The rest of Melissus' doctrine is orthodox enough. Since Reality is infinite it must be One.[40] Since there is no empty space, there is nothing for Reality to move in, and hence no such thing as motion. Arguing apparently against Anaximander, Melissus also points out that the non-existence of

[40] Fr. 6, Burnet, *loc. cit.*

empty space precludes the existence of degrees of emptiness and fullness, and thus renders any process of condensation and rarefaction unthinkable.[41] The unreality of motion, again, makes the apparent spatial division of Reality into many different things also unreal. For "if what is real is divided, it moves." [42]

Qualitative variety and alteration are equally inconceivable. All change of quality and nature proves on examination to involve the old unthinkable self-contradictions of creation out of nothing and extinction in nothing. A new quality or nature would not exist anywhere before it appeared or after it disappeared. Melissus reinforces this argument by pointing out that if any characteristic of Reality, however humble or minute, could be actually erased and annihilated, as the idea of change implies, there would be no logical reason why in time all the qualities of the World-Stuff should not be rubbed out, and Reality reduced to blank nothing.[43]

The impossibility of qualitative change is also made the basis of an attack on the view that the order or arrangement, or as we might almost say, the internal relations of Reality can differ from time to time. Here, Melissus has in mind perhaps, such "evolutionary" theories of the origin of the Universe, as Anaximander's view that the world is formed by a separation of opposites within the Unlimited,[44] or the teaching of his contemporaries. Empedocles and Anaxagoras, that the world is formed by the alternate separation and mixture, or the whirling apart, of an originally conglomerate mass of various elements. Finally, a curious statement that the World-All cannot suffer grief or pain,[45] is perhaps directed against the Heracleitan doctrine that opposites are identical and that the seeming evils and imperfections of existence all contribute to the "hidden attunement" and completeness of Reality.[46]

[41] Fr. 7, Burnet, *Early Greek Philosophy,* 3rd ed., p. 323.
[42] Fr. 10, *op. cit.,* p. 324.
[43] Fr. 7, *op. cit.,* p. 322.
[44] *Cf.* Burnet, *Early Greek Philosophy,* 3rd ed., p. 326.
[45] Fr. 7, Burnet, *op. cit.,* p. 323.
[46] *Op. cit.,* p. 326.

Melissus supplements these direct arguments in favor of the unity, the eternity, and the unchangeableness of the All, with an indirect demonstration in the style of Zeno's "dialectic." Suppose, he says, that Reality is after all Many, not One, and is composed of different elements and qualities like "earth and water, and air, and iron, and gold and fire," black and white, warm and cold, soft and hard, the living and the dead.[47] Even in that case the old argument against creation out of nothing and absolute annihilation will still hold good, and hence the ultimate constituents of the Universe, if they are to be conceived as really existing, cannot be conceived as coming into or passing out of being or as altering their natures. Each one of the Many, then, will prove to be a miniature Parmenidean One, and their apparent alteration and interchange will still be unreal and illusory.[48] But if the Many lie to us when they seem to change, we may also reasonably suspect the truthfulness of their seeming multiplicity and variety. The transformation of one thing into another and the difference of one thing from another might be held to stand or fall together.

This argument, it has been suggested, is directed principally against the teaching of Melissus' contemporary, Anaxagoras, that Reality was originally a mixture of many articles endowed with the qualities and natures perceived by our senses such as white, black, iron rust, etc., and that the first step in the evolution of the world was a separation from one another of opposite kinds of molecules.[49] Still, Anaxagoras agreed perfectly with Melissus that the particles of hot, cold, soft, hard, and what not were eternal and unalterable, and tried to explain apparent transformations of quality as in reality a simple presence of now more, now less, of one kind of atoms than of another. It would seem as if at any rate the reference to the belief "that what is warm becomes cold, and what is cold warm; that what is hard turns soft, and what is soft hard; that what is living dies, and that things are born from what lives not, and

[47] Fr. 8, Burnet, *Early Greek Philosophy,* 3rd ed., pp. 323-4.
[48] *Loc. cit.*
[49] Burnet, *Early Greek Philosophy,* 3rd ed., p. 328.

that all these things are changed," [50] might be more directly aimed at Heracleitus.

We must note finally, a statement of Melissus which has given rise to considerable speculation and difference of opinion among commentators. "Now," he says, "if it were to exist, it must needs be one; but if it is one, it cannot have body; for, if it had body it would have parts, and would no longer be one." [51] The "it" has commonly been taken to refer to Being, and the fragment as a whole has been interpreted as an assertion that Reality is incorporeal. This view, however, has been opposed both on the ground of its inconsistency with Melissus' other statements, as for example that Being is "infinite in magnitude," [52] and for reasons of textual criticism into which we need not enter. Melissus is referring, it is said, not to Reality but to the indivisible yet spatially extended units of which the Pythagoreans believed all things to be composed, and is joining hands with Zeno in attacking them.[53] A similar question arose, we may remember, as to whether Parmenides considered Being abstract and immaterial or concrete and material, and was decided in favor of the latter alternative. So, too, in the case of Melissus it seems much more in accord not only with the general tenor of his teaching but with all we know of the previous development of philosophy to suppose that he had not differentiated the incorporeal, from the spatial and material, aspect of existence. He still thought of Reality in the old Milesian way, as a World-Stuff.

We may now attempt a summary of the Eleatic doctrine as a whole. Whatever exists must be thinkable, that is, logically consistent. Nothing cannot exist since it is impossible to think of nothing. But creation and destruction, and even change of nature and quality, involve coming into being from nothing, and going out of being into nothing. Hence Reality must be uncreated and indestructible, and of an unchangeable nature

[50] Fr. 8, Burnet, *Early Greek Philosophy,* 3rd ed., p. 323.
[51] Fr. 9, *op. cit.,* p. 324.
[52] Fr. 3, *op. cit.,* p. 322.
[53] Burnet, *Early Greek Philosophy,* 3rd ed., p. 327.

subject to no alteration of any sort. Qualitative difference cannot arise within it.

Again, since nothing cannot exist, empty space cannot exist, for empty space is no thing, but is void. Reality, therefore, must pack space solid. Or rather, the corporeal and spatial aspects of Reality are inseparable. But if there is no empty space, there can be no motion, since movement requires room and room implies unfilled extension. In Reality, therefore, there can be no spatial movement or, to put it technically, no locomotion. "What is" must be as still as it is colorless. Finally, if there is no empty space, no quantitative divisions or parts can take place or exist in the Real, since division would imply movement apart, and the distinction of parts from one another would imply the existence of empty space between them. In a word, Reality, whatever it may look like, can be logically conceived only as one single rigid block of solid, absolutely continuous and transparent substance, without crack or flaw or iridescence. Hence multiplicity, variety, change, alteration, development, motion, etc., are all illusion and false opinion.

Reality is One, in contradiction to the Pythagorean doctrine of Number and the two Principles of the Odd and Even, against which both Parmenides and Zeno had revolted. It packs space solid in protest against the implication of empty space, and hence of the existence of nothing, latent both in Anaximenes' doctrine of condensation and rarefaction, and in the Pythagorean teaching that the dense Limited is surrounded and permeated by the light, thin Unlimited. It is a severely simple static, unchanging, ever-the-same sort of One, in logical succession to the Milesian World-Stuffs, and in opposition to the brilliant, restless, versatile, never-the-same Oneness of the perpetual Flame and Becoming of the Heracleitan Fire.

According to Parmenides, the unchangeable and motionless Reality is lifted clear of time. In it there is no past or future, but simply what modern philosophers have called the timeless present. In other words, it is eternal. Time shares the fate of its blood-brothers, change and motion, and is relegated with them to the realm of false opinion and illusion. According to

Melissus, however, Reality is infinite in time. It is not eternal but everlasting.

Again, Parmenides teaches that Reality is a sphere, thereby curiously anticipating some of the most recent hypotheses of the mathematics and physics of to-day, as, for instance, the Einstein Theory. Melissus, on the other hand, reverts to the view, more popular then as now, that the spatial extension of Reality is infinite in every direction.

Both Parmenides and Melissus use a direct method of argumentation. Parmenides develops his case by analyzing the meaning and deducing the consequences of the statement that something exists. He sets up reason as the test of truth and of the possibility of existence. Anything which proves to be unthinkable cannot really exist, however evident it may seem to the senses. By virtue of this out and out assertion that what cannot be thought cannot be, and because of his habit of demonstrating his conclusions step by step in public, he may be regarded as the promoter if not the discoverer of logic as a special science or subdivision of philosophy.

Zeno's method is different. In his attack upon the existence of the Many, and in his famous paradoxes of Achilles and the tortoise, the flying arrow, and the bodies moving at different speeds, with which he seeks to disprove the possibility of motion, he uses what is called the dialectical method. He admits for the moment the truth of his opponents' theories and then exposes the self-contradictions which their truth entails. Zeno is regarded by Aristotle as the inventor of this method, which later plays so brilliant a part in the philosophizing of Socrates and Plato.

We may conclude our discussion of the Eleatics by also briefly reviewing and summarizing our estimate of their contribution to the development and future direction of philosophy. We noted, in the first place, that Parmenides brought about a metaphysical crisis by pushing to its logical conclusion the Milesian hypothesis of a single homogeneous World-Substance, and showing that it rendered multiplicity, variety, change, empty space, and motion all unthinkable. At the same time he had proved to the satisfaction of his opponents as well as

of his followers that the World-Stuff must be changeless and fixed both in quantity and quality. Two alternatives were now possible to speculation. Either the unfixed and changing everyday world could be regarded as unreal and illusory, and philosophy could turn skeptical or mystical, or a new theory of the World-Stuff might be reasoned out which should reconcile the indestructible and unalterable nature of matter with the multiplicity, the variety, the change, and the motion apparent to the senses. This latter alternative was embraced first by philosophy. The immediate result and concomitant of Eleaticism was an assertion of the existence of motion, and a division of the Parmenidean One into a fixed quantity of unalterable particles or atoms whose shifting combinations and arrangements accounted for the variety, the "becoming," and the apparent coming into and passing out of being, of phenomena. Eventually a further study of motion made the possibility of movement depend upon the real existence or empty space as something distinct from the matter which moves in it. Thus the Eleatic School played the part of an unkind and provocative stepmother to the developments which we shall take up in the next chapter.

But the other alternative lay dangerously open. By insisting upon the exercise of pure reason as the only means of determining what really exists, Parmenides, curiously enough, paved the way both for skepticism and mysticism. The mind thrown back upon logic for its only guide not unnaturally asked reason to give an account of the Reality to which the way of Truth led. But reason in reply could give no positive description of Reality except to say that it was round. For the rest it could describe it only negatively. And the inquiring mind might well feel that the single negation "unknowable" covered all the other "un-s" and "im-s," and "a-s." Melissus is well on his way to skepticism when he says that although we "say that we see and hear and understand aright . . . it turns out that we neither see nor know realities." [54] Another step, and we have reached the verdict of the Sophists that the evidence for any Reality outside our individual experience is undemonstrable,

[54] Fr. 8, Burnet, *Early Greek Philosophy,* 3rd ed., pp. 323-4.

and that no such thing as absolute truth can be established. Thus Eleaticism inspires not only the reconstruction undertaken by Empedocles, Anaxagoras, and Democritus, but also the agnosticism by which their theories were condemned.

But skepticism, thanks to man's inveterate curiosity and self-confidence, is seldom a fixed or universal mood. If the mind is convinced, that the Way of Truth and Reason is as blind an alley as that of Sense and Opinion, it will press on towards the heart of things by a third way of mystical inner experience, immediate feeling, and direct contact with the Real. Otherwise it will try the way of Truth again, confident that the mirage of phenomena is not a mere trick played the senses by an interminable desert of logical negations, but rather reflects the existence beyond the horizon of a fertile and fruitful World-Ground which thought can really reach. In a more jaded age, the Eleatic School might have not only stimulated but also guided a mystical reaction. That the world of phenomena is all false opinion and illusion; and that all things are really One are cardinal points of any mystical theory. And the failure of reason to describe Reality except in negatives invited feeling and ecstasy and beatific vision to fill in the blank.

But logic was too fresh to be dismayed by skepticism, and reasserted that the Truth can be known. The agnosticism of the Sophists was followed by the philosophies of Plato and Aristotle. To this new reconstruction, also, the Eleatics ministered. Their tests of "what is" were again accepted. Reality had to be thinkable, unalterable, eternal. Skepticism, however, had sharpened the critical faculty and diverted philosophic interest from the physical to the mental aspects of the world. The new analysis of experience discovered that what is thinkable, unalterable, eternal, and therefore real, in things is not the Stuff of which they are composed but the universal Types and Laws by which a matter otherwise fluid and formless is molded and stabilized. Thus, when the empty frame of the Parmenidean Reality was again filled in, the picture was not of concrete indestructible and unchangeable elements and atoms, such as constituted the World-Stuffs of Empedocles and Anax-

agoras and Leucippus. It was rather of the Heracleitan Logos amplified into a system of abstract changeless and abiding Forms to which the Universe owes its enduring structure and its rational and orderly character. Conversely, Matter which had once been the substance of the Real and had paved the Way of Truth with solid Being, now became the ground of appearance, error, and illusion, and paved the Way of Opinion with "such stuff as dreams are made of."

But we have already posted far in advance the road which we are to travel. Let us now pass on to inspect that section of it which is laid on a foundation of material elements and atoms.

## CHAPTER VII

## THE PLURALISTS

### I

Although they hailed from different ends of the Hellenic world and differed widely in their teaching, the philosophers whom we are about to study are, with the exception of Diogenes, frequently grouped together by historians of philosophy. The reasons for this grouping lie in certain fundamental similarities beneath the surface diversity of their doctrines, in the common bias with which they seem to approach some of the philosophic problems of the day, and in the continuity of development which we can trace in their theories. The nature of their agreement is indicated by the epithets applied to them. By some they are called the Pluralists, because they are at one in asserting the reality of the Many, by others the Materialists or the Mechanists because in the course of their speculations they evolve a theory of Reality as Matter in motion running automatically like a machine. Again, their philosophies are sometimes considered attempts at the reconciliation of Heracleitus with the Eleatics, since they combine a belief in the reality of change and motion with the view that the World-Stuff is changeless and eternal. These headlines are vivid and useful generalizations. But we should remember that, with the possible exception of their pluralism, the thinkers in question were not necessarily gifted with the power of seeing themselves as others see them. Like the Milesians they would probably have demanded further explanations only possible in the perspective of subsequent history, before professing a willingness to own these soft impeachments.

The gossip which obscures the life of Empedocles is second only to the legends which enshroud Pythagoras, and sometimes

outvies them. For this gossip it must be admitted, Empedocles himself is somewhat to blame, seeing that he claimed that he was an "immortal god . . . honored among all as is meet, crowned with fillets and flowery garlands," [1] who possessed "the power to heal old age and sickness, to raise and calm the winds, to summon rain and draught and to bring the dead to life." [2] By later commentators he is credited with having actually raised the dead and stopped the northern "monsoon" from blowing upon his native city, as well as with the more practical work of delivering the city of Selinus from pestilence by flooding the adjacent marshes. The manner of his death is also variously reported. He is said to have disappeared in the night at the summons of a great voice and in the midst of a great light from heaven; to have jumped into the crater of Etna; to have hanged himself; to have fallen out of a chariot; and to have fallen into the sea and drowned from sheer senility.

The truth is that Empedocles like Pythagoras lived a double life. On the one hand he was a doctor, a scientist, and a philosopher, the founder of Italian medicine according to Galen, and of rhetoric according to Aristotle. On the other he was a religious mystic, profoundly influenced in his beliefs by the Pythagoreans and the Orphic movement. And, as has so often happened in other cases of the same sort, he kept from his right hand all knowledge of the doings of his left, and *vice versa*. His religion and his philosophy, like the Catholicism and the science of Pasteur, to take a modern example, went their way side by side unhampered and unprejudiced by one another. Thus he could believe in his own supernatural origin and powers and get the name of a miracle-worker at the same time that he thought out a philosophic system and built up a great scientific reputation. Moreover, it should be remembered that then as now medicine was fringed with mystery and magic. But in those days it was mostly fringe and its patent medicines, panaceas, quacks, and healers had not been curbed by the development of sound practice.

[1] Purifications. Fr. 112. Burnet, *Early Greek Philosophy*, 3rd ed., p. 222.

[2] Zeller, *Pre-Socratic Philosophy*, II, p. 119, note.

Besides being a devout mystic, a self-deceived miracle-worker, a keen physiologist and doctor, and a great philosopher, Empedocles also inherited the political traditions and talents of a governing class. He came of one of the most aristocratic and richest families of Acragas or Agrigentum in Sicily. His grandfather, after whom he was named, had bred and run the horses which won for his family and city the additional distinction of victory in the chariot-race at the Olympic games. His father had taken part in the overthrow of the tyrant Thrasydæus and became one of the most influential leaders of the newly established democracy. Empedocles likewise, when he grew up, was to prove himself an eminent man of affairs.

The times to which he was born, probably a little before 490 B. C., were stirring enough. The news of Marathon he would have been too young to remember. But as a small boy he may well have seen the Acragantine troops marching out to attack Himæra, a town on the other side of the island, and to depose its tyrant. And he must have shared in the terror and excitement when Carthage made of this incident a pretext for launching the attack on Sicily which she had long been preparing, in secret alliance with Xerxes, to accompany the renewal of the Persian offensive against Greece. He must also have watched the troops march out once more, this time against seemingly overwhelming odds, and have taken part in the mingled mourning and rejoicing when the messengers returned to tell how, after a desperate battle, the Carthaginians had been routed at Himæra by the combined forces of Acragas and Syracuse, and Sicily was saved. Later would have come the news of the almost simultaneous defeat of Xerxes at Salamis (480 B. C.).

Empedocles grew to manhood in the eight brilliant and prosperous years which followed the repulse of Hamilcar. He was about twenty years old when the able and beloved tyrant Theron died. The death of the tyrant was almost immediately followed by the overthrow of his son, the worthless Thrasydæus, who in his short year of misrule had involved Acragas in a disastrous war with Syracuse, and a democratic constitution was established. Empedocles showed himself even more mark-

edly liberal in his politics than his father, for later when the aristocracy had regained control of the government and there were whispers of a restoration of the tyranny, he thwarted the plot and assumed the leadership of the popular cause. He even anticipated the example of George Washington by refusing the kingly crown offered him by the grateful people.

But Empedocles soon had cause to mourn the gratitude of men. The Acragantine democrats, like Heracleitus' fellow-Ephesians, would suffer none above the average among them. Empedocles went off to Olympia, perhaps not altogether willingly, to present his philosophic poem at the Games. His enemies succeeded in turning his absence into an exile from which he never returned. The manner, time, and place of his death are unknown. It probably took place in the Peloponnesus or at Thurii in southern Italy about 435 B. C.

In his religion, as we have said, Empedocles was under the spell of Pythagorean and Orphic mysticism. Both these movements, it will be remembered, were reformations, and the opening lines of the religious portion of Empedocles' poem announce his own sturdy protestantism. In his initial protest, however, the scientist and philosopher would seem to have joined hands for the moment with the religious reformer. It begins with a fervent prayer that he may "utter a pure discourse concerning the blessed gods." [3] and this petition is followed and answered by a denunciation of the popular Homeric theology with its Gods made in man's own image. In a spirit and in language which strongly suggest the influence of Xenophanes he proclaims that "It is not possible to set God before our eyes or to lay hold of him with our hands." [4] God is without body, passions, or parts, "a sacred and unutterable mind flashing through the whole world with rapid thoughts." [5]

These verses, however, like similar utterances of Xenophanes, should not be regarded as an indication of a belief in monotheism. Empedocles' protestantism did not suggest, and his science forbade, such a conclusion. In the philosophic part of

[3] Fr. 131, Burnet, *Early Greek Philosophy*, 3rd ed., p. 225.
[4] Fr. 133, *loc. cit.*
[5] Fr. 134, *loc. cit.*

his poem he speaks of the World-All as God,[6] and we are told that he also considered its constituent elements divine.[7] The flashing through the whole world of sacred and unutterable mind is probably little more than a brilliantly phrased equivalent to the homely seeing, thinking, and hearing "all over" of Xenophanes' God. Indeed, far from preaching a personal God, Empedocles like his predecessor would seem to be protesting against the confinement of the divine to the persons of the man-like popular deities. God, he feels, can no more be separated from the World-Stuff than can thought or life or empty space. The Universe not only sees, thinks, and hears, it is also God "all over." Empedocles, to be sure, in both the religious and scientific portions of his poem speaks conventionally enough of "the Gods," but they correspond more closely to what we should call "angels," and the only scientific note he takes of them is to mention them along with "trees and men and women, beasts and birds and the fishes," [8] as sample products of the World-Stuff.

This rejection of the "established" Homeric theology Empedocles supplements with a positive declaration of faith in the central article of the Orphic creed—the doctrine of reincarnation. Man, he tells us, is a fallen "god" or "dæmon," an "exile and a wanderer from the gods," [9] doomed to "wander thrice ten thousand seasons from the abodes of the blessed, being born throughout the time in all manners of mortal forms, changing one toilsome path of life for another." [10] Such is the fate which has befallen Empedocles himself. Already in the course of birth and rebirth "he has been a boy and a girl, a bush and a bird, and a dumb fish in the sea." [11]

The hope and means of salvation are of the familiar mystic type. As with the Buddhists, a long discipline of purification is necessary lasting through many births. This discipline, mod-

[6] Fr. 30, 31, Burnet, *Early Greek Philosophy,* 3rd ed., p. 211.

[7] Cicero, *De Nat. Deorum,* XII, Diels, *Doxographi græci,* 535; Aristotle, *Gen. Corr.,* II, 333b. *Cf.* Fr. 59, Burnet, *op. cit.,* p. 214.

[8] Fr. 23, Burnet, *op. cit.,* pp. 209-10.

[9] Fr. 115, Burnet, *Early Greek Philosophy,* 3rd ed., p. 222.

[10] Fr. 115, *loc. cit.*

[11] Fr. 117, *op. cit.,* p. 223.

eled apparently on the Pythagorean rule, lay not merely in the observance of moral precepts but in the avoidance of tabooed articles. The eating of flesh, and incidentally the established rite of animal sacrifice with which the worship of the Olympian Gods was celebrated, were particularly abhorrent, since it may be that the "father lifts up his own son in changed form and slays him with a prayer," and that "in like manner does the son seize his father, and children their mother, tear out their life and eat the kindred flesh." [12] Laurel, which represented the highest stage of purification to be attained in vegetable form, and the already familiar Pythagorean bean, were also taboo.

In the end, the wholly purified and redeemed, who stand, as the Buddhists would say, on the brink of Nirvana, are reincarnated in the noblest human forms and at their death are reunited with their divine source. Empedocles describes their release in words inspired, it would almost seem, by the famous picture of the Islands of the Blest in the great ode with which Pindar immortalized the victory of Theron of Acragas at the Olympic Games.[13] The purified "appear among mortal men, as prophets, song-writers, physicians, and princes; and thence they rise up as gods exalted in honor, sharing the hearth of the other gods, and the same table, free from human woes, safe from destiny, and incapable of hurt." [14]

To match this vision of the "prophets, song-writers, physicians, and princes" awaiting the moment of their final redemption, Empedocles has also the vision of a Golden Age. In verses which again remind us of Pindar's ode he sings of a time when men even in their human state were as yet innocent of evil, and dwelt at peace with one another and with beasts and birds, shaded by ever fruitful trees, and charmed by the wise discourses of Orpheus.[15]

We turn now from Empedocles the Orphic mystic to the other Empedocles, the scientist and philosopher. Just as his

[12] Fr. 137, *op. cit.*, pp. 225-6.
[13] Olymp. II. *cf.* Cornford, *From Religion to Philosophy*, pp. 228-9.
[14] Fr. 146, 147, Burnet, *Early Greek Philosophy*, 3rd ed., p. 226.
[15] Fr. 129, 130, Burnet, *op. cit.*, pp. 224-5. *Cf. Ibid.*, 1st ed., p. 236, note 7.

religious beliefs were the result of Pythagorean influence, so his chief scientific interests—medicine, physiology, and the like—can scarcely have been developed independently of the medical studies fostered by the Brotherhood and already so brilliantly exemplified in the researches of his fellow philosopher-doctor, Alcmæon. But if his religious, and to some extent his scientific, views were the result of Pythagorean influence, his philosophical speculations may be traced directly to Eleatic teaching. Tradition, indeed, makes him in a literal sense a schoolmate of Zeno and a pupil of Parmenides. However, that may be, he adopted, like Parmenides, verse as his vehicle of expression, and accepted many of the fundamental Eleatic tenets, such as the indestructible and unchangeable character of the World-Stuff, the impossibility of any real coming into, or passing out of being, and the non-existence of empty space. He even thought of the World-Stuff as originally at any rate a Parmenidean Sphere.

But just as Parmenides had revolted from the Pythagoreans, so Empedocles in his turn rebelled against the extreme conclusions of the Eleatics. He might be persuaded by their arguments that Reality must be changeless and eternal and that empty space cannot exist, but he could not agree to their further deduction that therefore the everyday world of change, motion, and multiplicity is all "hypnotism," false opinion, and illusion. The reason is not far to seek. The cast of his mind was quite different from that of Parmenides. Parmenides was a born logician, Empedocles a born experimental scientist, turned philosopher. It was the native impulse of the one to start from a logical principle and deduce his system at all costs from the exigencies of pure reasoning; of the other to start from the perceived data of the everyday world and build according to the suggestions of observation and experiment. Furthermore, the fields in which Empedocles was most interested—medicine, physiology, natural history, and the like—were just those in which movement and change, generation and dissolution, were most marked. He could scarcely be expected to accept without examination the results of a logic which proclaimed all natural phenomena unreal, made all scientific re-

search mere idle dalliance along the Way of False Opinion and rendered his favorite studies particularly ridiculous.

His problem, then, was to justify his interest in natural science in the face of Eleatic reasoning. He may possibly have also had in mind a reconciliation of Heracleitus' views with those of Parmenides. The question, however, of the extent, and indeed of the existence, of Empedocles' debt to Heracleitus is disputed and obscure.[16] In any case, with or without Heracleitus in mind, he daily perceived and studied the Many, their flux, their movement and interchange, their apparent coming into and passing out of being. And yet the Eleatics had persuaded him that any real coming into being or passing away was out of the question, and brought forward the most cogent arguments against the possibility of multiplicity and motion. Could the evidence of his senses be reconciled with the exigencies of their logic?

So far as motion was concerned the non-existence of an empty space to move in need not have troubled him. Descartes later denied the existence of a vacuum and still successfully asserted motion; and within the Parmenidean sphere of solid, continuous Being circulation and change of place were still conceivable. The Sphere might even have spun on its axis like a top, and yet been stationary. But Empedocles is not driven to these expedients. Though he denies the possibility of a void he surreptitiously admits it, when, as we shall see in a moment, he conceives of Reality as a loose mass of particles between which chinks and interstices, and therefore free play and interpenetration, exist. The Eleatic truths, then, need not preclude the possibility of movement.

The question of multiplicity and variety proved a harder nut to crack. The old Milesian assumption that the One can juggle itself into a Many had been shown up by Parmenides. If Reality is simple and homogeneous, the distinction of one thing from another must be unreal. But need Reality be conceived as One? Cannot the Many be equally indestructible and changeless? Might not even the Sphere be compounded of dif-

[16] *Cf.* Zeller, *Pre-Socratic Philosophy,* p. 202; Burnet, *Early Greek Philosophy,* 3rd ed., p. 227.

ferent elements without prejudice to its eternal and unalterable character? Whether or not Empedocles punctuated with just these interrogation points his questioning of Parmenides' doctrine, is immaterial. In any case they are answered in a pluralistic sense in the course of his speculations.

The Parmenidean Sphere he "quarters," as it were, and compounds it of Earth, Water, Air, and Fire. Incidentally he had differentiated air from the vapor or mist confused with it in the system of Anaximenes, and had proved experimentally that its seemingly empty transparency was really a substance like the others.[17] Why he hit upon four substances, and these particular four, has been much discussed and never settled.[18] He set, however, a fashion which struck the popular fancy and persists even to-day. Though they were long ago outgrown and discarded by science, the "four elements" are still a popular figure of speech. Empedocles also distinguishes them with the mythological titles, Hera, Zeus, Nestis, and Aidoneus. But as these titles play no part in his system, and their precise application is in dispute, we need not bother further with them.[19]

The problem of multiplicity and variety was now solved to Empedocles' satisfaction. All the surface complexity of the world as it appears to the senses could be reduced to forms of these four substances or different mixtures of them. "Behold the sun everywhere bright and warm, and all the immortal things that are bathed in heat and bright radiance. Behold the rain, everywhere dark and cold; and from the earth issue forth all things close-pressed and solid." [20] Of just what qualities in the sensible world Air is the substratum, he does not mention.

We start, then, in Empedocles' system with the four elementary substances, Earth, Water, Air, and Fire, each one of which, after the fashion of the Eleatic Reality, is uncreated and indestructible, unalterable, and incapable of transforma-

[17] *Cf.* Burnet, *Early Greek Philosophy,* 3rd ed., p. 229.
[18] *Cf.* Zeller, *Pre-Socratic Philosophy,* II, p. 127 *et seq.*
[19] *Cf.* Zeller, *op. cit.,* II, 125, note. Burnet, *loc. cit.*
[20] Fr. 21, Burnet, *Early Greek Philosophy,* 3rd ed., p. 209.

tion into anything else. Combined with this hypothesis we have the un-Eleatic and Heracleitan belief in the reality of motion, and the assurance that the kaleidoscope of phenomena can be explained as due to the varying mixture and separation in space of the four ultimate elements.

The case, however, is not so evident as it seems. For how does motion originate? The Sphere of Being is full to the brim of substances completely intermingled and dissolved in one another's natures. What is to shake them down? And after they have been isolated from one another, what is to shake them up again? The problem which confronted Empedocles was but a philosophic form of the difficulty which Roosevelt found in "unscrambling the eggs" when he set about breaking up the American Trusts.

Empedocles' realization that the existence of motion constitutes a problem marks a step forward in the development of philosophy. The Milesians had taken it for granted that the World-Stuff naturally moves and transforms itself. Furthermore, the solution which Empedocles offers is an advance in the direction of separating the concept of Energy and Activity from that of Matter. He does not himself arrive at the idea of Force as distinguished from the solid and corporeal aspects of the world, but he collects all the energy in the Universe and concentrates it in two dynamic, energetic substances apart from whose activity the four elements would be inert. The mixture and separation of Earth, Water, Air, and Fire is affected by the alternate give and take of Love and Strife. It is commonly considered that Empedocles thought these agents to be quite as corporeal in nature as the other elements, to which they are said to be equal in length, breadth, weight, and age.[21] The suggestion, however, has also been made that they are indications of the Greek habit, already noted in our discussion of Greek religion, of viewing the world as essentially a social order, and that they represent the transference to Nature of the opposed tendencies in human society towards tribal amalgamation and solidarity on the one

[21] *Cf.* Zeller, *Pre-Socratic Philosophy,* II, p. 138; Fr. 17, Burnet, *Early Greek Philosophy,* 3rd ed., pp. 207-8.

hand and disintegration into smaller units on the other.[22] From this point of view they are "life-forces" or "vital-fluids," [23] expressions of that companionable feeling towards Nature which so long kept Greek religion from distinguishing between persons and things, and Greek philosophy from finding principles distinct from body for life and consciousness.

However that may be, they possess an animation and a "push" which the other substances lack. Love is the stuff or "fluid" which impels the four elements to mingle and fuse with one another, Strife the stuff which drives them apart, isolates them, and precipitates them from the fusion. It almost seems as if Empedocles were seeing through a glass darkly the modern forces of attraction and repulsion or even those mysterious substances known to the chemist as catalyzers, which with cynical indifference are always provoking reactions and stirring up trouble among the other elements in which they themselves are not involved or affected.

The picturesque and passionate character of these dynamic substances has provoked considerable discussion and speculation among critics from the time of Aristotle on. Aristotle, and later Plutarch, conferred upon their activities a moral significance, making Love the author of the good, and Strife the worker of the evil, in the world.[24] Aristotle, however, in another passage points out that the rôles of hero and villain are really interchangeable, since Strife in tearing the elements from the inextricable confusion of one another's embrace reunites the scattered particles of all four elements with particles of their own kind. Similarly, Love produces fusion only by breaking up the homogeneous masses of Earth, Water, Air, and Fire and driving them apart.[25]

It has also been maintained by a modern school of criticism that we have here a very real and extensive leakage from the religious and mystical compartment of Empedocles' mind into his science and philosophy. The alternate precipitation and

[22] *Cf.* Cornford, *From Religion to Philosophy,* pp. 60-63.
[23] *Ibid.,* pp. 151-152.
[24] Aristotle, *Metaphysics,* I, 4, 984*b*, 32. Plutarch, *De Is.* 48, p. 370.
[25] Aristotle, *Metaphysics,* I, 4, 985*a*, 21.

fusion of the elements by Strife and Love, are, it is claimed, the objective and cosmic counterpart of the fall and redemption of man. "The sphere is the body of God, and Love is the Soul which pervades it." [26] The intermingling of all things, intoxicated, as it were, by Love, is all of one piece with the original union of all souls with the divine. Strife is the principle which produces a multiplicity of beings, estranges them from Soul, allots them their limited natures, and submits them to the harsh yoke of necessity. The fallen soul has put her trust "in insensate strife." [27] The Golden Age is apparently placed at the very beginning of the epoch in which Strife overcomes Love. The Orphic fall of the divine into human form, and the breaking up of the Sphere would then seem to be only two sides of one and the same process.[28]

Here again, however, as in the case of the Orphic interpretation of Parmenides, we are treading on very difficult and debatable ground. The conservative view which minimizes the influence of Empedocles' religion on his philosophy has plenty of precedent in other philosophers and scientists, and is perhaps the safer.

Empedocles himself connects Love, more immediately at least, with his physiological observations of the sexual instinct in man and the other animals, and claims to be the first to note that the human passion is also a world-force. The antithesis, too, of Love and Strife would seem to have been suggested by the antithesis and alternations in the World-Process of birth and decay and of the apparent coming into and passing out of existence which his system tried to explain.

Having thus given himself matter and motion, Empedocles was now in a position to construct his world. The point at which he chooses to begin is the moment when Strife was altogether outside the Sphere, and the four elements, suffused and completely intermingled by Love, lay indistinguishable in the Sphere—"so fast was the god bound in the close covering of Harmony, spherical and round, rejoicing in his circu-

[26] Cornford, *From Religion to Philosophy,* p. 234.
[27] Cornford, *op. cit.,* p. 231, p. 236 *et seq.*
[28] Fr. 115, Burnet, *Early Greek Philosophy,* 3rd ed., p. 222.

lar solitude." [29] In the fullness of Time, Strife began to enter the Sphere and to precipitate the elements held in solution. Love began to retire slowly checking and offsetting Strife as it went. Eventually, when Strife had completely entered in and permeated all things and Love had been wholly squeezed out, the process of disentanglement was complete, and the four elements were altogether apart from one another. This period of isolation was followed by a reverse process, in which Love entered in and slowly gained the ascendency. Little by little Strife was squeezed out, till once more Fire, Air, Water, and Earth were completely fused in the Sphere.

The alternate ebb and flow of Strife and Love and the consequent separation and mixture of the four elements are apparently conceived as automatic, and Empedocles among others is taken to task by Plato for having taught that the creation of the world is effected "not by the action of mind . . . or of any God, or from art, but . . . by chance and nature only." [30] Mixture and separation are accomplished by the elements "running through one another." This they can do as their masses are loose and porous, and the holes in the coarser elements are larger than those which break up the finer substances. Earth, then, can soak up or squeeze out water, Air can permeate the chinks and crannies between the water-drops, and Fire can find its way in and out of the interstices of the Air. Love and Strife, it would seem, can even go through Fire, and insinuate themselves everywhere. That this loose-laid character of the elements implied the existence of empty space Empedocles did not seem to realize.

When the counterwise tides of Love and Strife are just at the turn, and the elements are either wholly fused or completely precipitated, obviously no Universe can exist. The formation of a world can take place only during the periods when intermingling or separating is still in process. The world in which we are living belongs, Empedocles thinks, to the period in which Strife is in the act of casting out Love.

The way in which our world arises is as follows. First, Air

[29] Fr. 27, Burnet, *Early Greek Philosophy*, 3rd ed., p. 210.
[30] Laws X, 889b.

is separated out, then Fire, and then Earth. Fire rushes up and solidifies a portion of the Air into a sort of crystalline egg-shell surrounding the Universe—a reminder perhaps of the Orphic world-egg from which the God Phanes was hatched. It attaches itself here and there in spots to the crystallized Air, and forms the fixed stars. Below the upper portion of the egg-shell a hemisphere of Fire is created. The upward rush of Fire also causes displaced Air mixed with Fire to sink below the earth and form a corresponding hemisphere. It furthermore makes the sphere as a whole top-heavy and sets the heavens in motion. The revolution of the sphere, presenting a face now of Fire, now of Air, to the earth produces the alternation of day and night. The sun is the light poured down by the fiery hemisphere upon the earth and reflected from its surface upon the heavens. Here we perhaps detect the echoes of the Pythagorean doctrine of a central fire about which the sun revolves and from which it gets its light. The moon is a crystalline body which reflects the light of the sun. The planets are made of the fire pressed down with the displaced Air. The Earth is precipitated to the center, and Water is separated from it by the squeezing due to increasing pressure. The spinning motion of the Universe acts like a sort of cosmic gyroscope, and holds the earth and the heavens in their proper places.

Of the origin and development of life Empedocles gives us an interesting account which, like the views of Anaximander, forestalls to some extent the Darwinian theory of evolution. A certain mixture of the four elements forms the primitive organic compound, or, as we might say, the "protobion." The Love which still holds this mixture together is being slowly overcome by Strife and each of the elements is seeking to be precipitated and united with its own kind. The complications which ensue form first vegetable, and then animal, life. To vegetable life Empedocles attributed bi-sexuality—a fact rediscovered by modern botany—as well as sensation, pleasure and pain, and even desire. The upward growth of plants is due to the striving of the Fire still mixed with Earth and Water to shake itself

free and unite with the upper hemisphere; their downward rooting to Water and Earth sinking each to its respective level.

The separation of Fire from the other elements also causes the evolution of animals and man. "Whole natured forms first arose from the earth, having a portion both of water and fire. These did the fire, desirous of reaching its like, send up." [31] As yet the sex and species of these forms were unrecognizable. The origin of species as well as the distinction of sex would be incidental to the further separation of the elements, caused by the increase of Strife. Such species as were "better suited to it took to the water; others were wafted up into the air for such time as they possessed more of the fiery matter, and the heavier remained on the earth." [32] Curiously enough, however, the species that took to the water seemed to have been the "warmest and the most fiery" which "sought refuge from the excess of their natural heat" and from "their lack of cold and wetness." [33] Meantime Love, still present though receding, would preserve the organic mixture, keep it molded in animal bodies and organs, and insure reproduction.

Even more striking, however, is the picture given of the evolution which occurs in the antipodes of our world-period when Strife has passed its flood, and the Universe is being reconstituted by the rising tide of Love. The first organic mingling of the elements takes the shape of a chaos of scattered limbs and organs, "heads . . . without necks, arms . . . bare and bereft of shoulders . . . eyes . . . in want of foreheads," [34] which "wander seeking for union." [35] These limbs and organs are thrown together by chance, and united in all sorts of haphazard and fantastic ways. "Many creatures with faces and breasts looking in different directions were born; some, offspring of oxen with faces of men, while others, again, arose as offspring of men with the heads of oxen, and creatures in whom the nature of women and men was mingled. . . ." [36] The creatures

[31] Fr. 62, Burnet, *Early Greek Philosophy,* 3rd ed., pp. 214-5.
[32] Aet. V, 19 (Diels, *Doxographi græci,* 430).
[33] Aristotle, *De Resp.,* 14, 478*a*.
[34] Fr. 57, Burnet, *Early Greek Philosophy,* 3rd ed., p. 214.
[35] Fr. 58, *loc. cit.*
[36] Fr. 61, *loc. cit.*

which prove to have "spontaneously acquired a fitting structure" [37] survive, whereas the unsuitable combinations perish. The fauna and flora, then, including the human beings, of the period dominated by Love are the results of a true Darwinian evolution, the direction of which is explained entirely by chance, by the struggle for life, and by the survival of the fittest. And just as the Nineteenth Century clergy denounced the Darwinian theory as godless and clung to the "argument from design," so Aristotle with something of their severity, but, it should be said, with nothing of their invective, attacked the mechanistic character of the Empedoclean theory with his favorite argument that things come into existence and develop their characteristic structures not by chance or from mechanical necessity, but in order to perform a certain function and fulfil a specific purpose.[38]

Empedocles was also a keen physiologist. His theory of evolution was supplemented from the field of comparative anatomy with various analogies between the structure of animals and plants. He thought, for example, that "hair and leaves and thick feathers of birds and the scales that grow on mighty limbs are the same thing." [39] He also developed theories of reproduction and nutrition and has left a long passage on the nature of respiration which leads in the direction of Harvey's discovery of the circulation of the blood. The blood, he says, pulses to and fro between the surface and the interior of the body. When it recedes inwards from the limbs the air streams in through the pores as well as the mouth and nose, to take its place; and when it returns towards the surface the air is expelled and "breathes out again in equal quantity." [40]

The "budding-off" of psychology as a special field of philosophic interest and investigation progresses rapidly in Empedocles' system. He does not, as we have seen, distinguish consciousness from the other aspects of the Universe any more clearly than did the Milesians or Heracleitus or Parmenides.[41]

[37] Aristotle, *Physics*, B, 8, 198*b*, 29 (trans. Burnet, *op. cit.*, p. 243).

[38] *Physics*, B, 8.

[39] Fr. 82, Burnet, *Early Greek Philosophy*, 3rd ed., p. 217.

[40] Fr. 150, *Ibid.*, p. 220.

[41] *Cf.* Gomperz, *Griechische Denker*, I, 2, v, § 5.

Just as Xenophanes' God "sees all over, thinks all over, and hears all over," so for Empedocles "all things have wisdom and a share of thought," [42] and in ourselves it is the basic substances mixed in the human body which think and feel pleasure and pain.[43] In the case of human beings, however, he tends to localize the seat of consciousness. He finds the part of the body "in which men's thought chiefly revolve" to be the blood, and particularly the blood round the heart. "The blood round the heart is the thought of men." [44] He chose the blood, we are told, because "in it of all parts of the body all the elements are most completely mingled." [45] Incidentally, the different capacities, temperaments, and humors displayed by mankind are the expressions of varying conditions and proportions in the mixture.[46] Again "sleep is a moderate cooling of the warmth of the blood, death a complete cooling," [47] due to the partial or entire separation of the Fire that is in a man from the other elements.[48]

It is, however, for its theory of perception that Empedocles' psychology is famous. The general principle is that "like perceives like." The Earth, Water, Air, Fire, Love, and Hate mingled in our bodies perceive each its kindred element in the external world. This sensitiveness of the elements within to the corresponding substances without is a matter of the similarity of their pores. Particles of Fire, for example, will dovetail with one another, whereas particles of Fire if fitted into the spaces between water drops would be like round pegs in square holes. External objects are continually giving off "effluences" as a result perhaps of the action of Strife in driving the elements apart. These effluences strike upon the body, enter the sense-organ whose pores are fitted to receive them, and are picked up by the like element within. Smell and taste are due to the contact of particles carried into the nose by the inbreathed Air,

[42] Fr. 110, Burnet, *op. cit.*, p. 221.
[43] Fr. 107, *Ibid.*, p. 220.
[44] Fr. 105, *loc. cit.*
[45] Theophrastus, *De Sensu*, 10 (trans. Burnet, *op. cit.*, p. 247).
[46] Theophrastus, *De Sensu*, 11.
[47] Aet. V, 24.
[48] Aet. V, 25.

or into the mouth by moisture. Hearing is the result of disturbances in the Air which enter the ear and make it resound. Of sight, Empedocles has a more complicated explanation. The eye is composed of Fire and Water. Particles of these glance out and meet the corresponding effluences from external objects. The Fire sees the bright, the Water the dark.[49] Pleasure, pain, and desire are also linked up with the affinity of like for like.[50]

Empedocles' utterances on the trustworthiness of perception and the relation of sense to reason [51] are not developed and are not altogether clear. According as they are punctuated, they may voice either a mild distrust of perception and an insistence on checking and correcting the reports of the senses by the opposed activity of reason,[52] or a plea not to withhold confidence from any of the sensory channels by which understanding in no wise opposed to perception may enter in.[53] But whichever interpretation be true, Empedocles did not lean far enough in either direction to fall into the problems of error and knowledge, and the question of Appearance *vs.* Reality. The senses introduced him to the Fire, Air, Water, Earth, Love, and Strife, which constituted his Universe. It was equally obvious that their presentations did not altogether acquaint him with the "home life," the relations, and the movements of these elements, and even suggested false ideas about them, such as their apparent coming into and passing out of being. Hence, in addition to perception some checking up by the exercise of common sense and thought was necessary, if he was to get a true view of things as they really are. Beyond this point, except for a rhetorical lamentation over the brevity of human life, the inadequacy of man's powers, the propensity of others to jump to hasty conclusions, and the difficulties of working

[49] For a more detailed discussion of the theory of sensation, *cf.* Zeller, *Pre-Socratic Philosophy,* II, pp. 165-166; Burnet, *Early Greek Philosophy,* 3rd ed., pp. 246-248.

[50] *Cf.* Zeller, *Pre-Socratic Philosophy,* II, p. 171.

[51] Fr. 2, Burnet, *Early Greek Philosophy,* 3rd ed., p. 204.

[52] Zeller, *Pre-Socratic Philosophy,* II, pp. 169-170.

[53] Burnet, *Early Greek Philosophy,* 3rd ed., p. 227. *Cf.* 2nd ed., pp. 219, 268.

out a philosophic system (difficulties, however, with which he feels himself able to cope), Empedocles' theory of knowledge does not go.

The affinity between medicine and philosophy which we find in Empedocles has lasted till to-day. In the great Skeptic, Sextus Empiricus, who lived at Alexandria about 300 A. D., in Avicenna and Averrhoes, the mediæval Arabian followers of Aristotle, in John Locke, the father of British Empiricism, and in the American, William James, we have other illustrious examples of the physician turned philosopher. Nor should we forget the medical and physiological studies with which Plato, Aristotle, and Lucretius in ancient times, and Descartes in modern, accompanied their metaphysical speculations.

For a while, too, the theory and practice of ancient medicine tended to be governed by philosophical considerations. The so-called father of medicine, Hippocrates of Cos, who was a contemporary of Empedocles, had rejected the view that some diseases, like epilepsy for instance, are of divine origin. All, he said, are equally God-sent, if you like, but none occurs without a natural cause. Doctors, however, for want of recourse to the will of God, began to take refuge in philosophy. Equivalents for the various fluids and substances in the body were sought in the World-Stuff, and the natural causes of illness were found in the relations of metaphysical principles. Diseases were instances in the human body of an upset of the balance of opposites or a lack of equilibrium between Fire, the principle of motion, and Water, the principle of nutrition, and were to be treated accordingly. To cases of too much wet the dry must be administered; as a remedy for a superfluity of cold, the hot was indicated. A sort of comparative anatomy of man and the universe likewise grew up. The stony structure of the earth was likened to the human skeleton, the water in the rivers to the blood in the veins; [54] and the parallel was even carried to the point of comparing the Peloponnesus to the head, Ionia to the diaphragm, and Egypt to the belly.

But this method of interpreting and treating the human body

[54] Gomperz, *Griechische Denker*, I, 3, i, § 4. For a similar analogy *cf.* the beginning of Leonardo da Vinci's *Trattato de l'Acqua*.

and its ailments met almost immediately with vigorous criticism and opposition. Treatment, it was maintained, should be governed not by hypotheses but by observation of individual cases. Disease was too complicated a condition ever to manifest in its symptoms unalloyed cosmic principles, like fire and water, the wet and the dry, or to permit of the administration of them as a cure. Philosophical entities had no more to do with healing a patient than with painting a picture, and Empedocles, along with other physicians and thinkers, was to be severely blamed for approaching medicine and physiology with a philosophical bias.[55]

The controversy thus initiated lasted long in the history of ancient medicine. The philosophic background faded, but the doctors continued to dispute whether abstract generalization and deduction, or observation of the particular case, should play the more important part in treatment. The last outburst of the controversy took the form of the uprising at Alexandria of a new empirical movement of protest against the dogmatism which by this time had infected the assertions of all schools alike. By Sextus Empiricus, an adherent of this movement, the revolt was carried back from the field of medicine to that of philosophy, and at the end of seven centuries the whirligig of time had another of its revenges in this reversed, skeptical alliance of the philosopher and the doctor.

Before passing on to Anaxagoras, who stands next on our list, let us review and consolidate our impressions of Empedocles. We have been dealing with a not uncommon type of man who can be without confusion or contradiction both a keenly observant, careful empirical scientist and philosopher, and the fervent devotee of a mystical religion and even of superstition and charlatanism. Empedocles drew his mystical religion from Orphic sources probably through Pythagorean channels, his medical training from the Pythagoreans, and his philosophy directly from the Eleatics, with some admixture perhaps of Heracleitan influence. He accepts Parmenides' view that any real coming into and passing out of being are unthinkable and that hence the World-Stuff must be eternal and unchangeable,

[55] Gomperz, *op. cit.*, I, 3, i, § 5.

but his "empirical" habit of thought revolts against the further conclusion that the multiplicity, change, and motion of the everyday world are therefore unreal and illusory. His problem as a philosopher is to save the reality of the world in which he takes so keen a scientific interest from being annihilated by the Eleatic logic.

His solution is as follows:—Against Parmenides he asserts, though he does not argue, the possibility of the existence of the Many, and of movement in space. The Eleatic Reality he analyzes into four basic, inert stuffs, Fire, Air, Water, and Earth, and two dynamic, active elements, Love and Strife. Each of these substances is as eternal and unalterable in its nature as Eleatic Reality. But, since movement in space is possible, the four inert stuffs can be intermingled or separated out, as the case may be, by the two active agents. The multiplicity, variety, change, and seeming coming into and passing out of being in the everyday world can then be explained as the mere motion, juxtaposition, and dispersion in space of many changeless and indestructible Parmenidean Ones.

A livable world can only exist when the process of fusion or separation is still going on. For when the process is accomplished the elements are either all massed and indistinguishably mingled in a compact Eleatic Sphere, or else wholly precipitated from one another and foregathered each with its own kind. The world in which we live is incidental to the slow breaking up of the Sphere and isolation of the elements under the influence of Strife.

The astronomical portion of Empedocles' account of the formation of our world is of comparatively little interest. When, however, we come to his speculations regarding the origin and development of life we find a theory of evolution which goes well beyond Anaximander's teaching that man has been developed out of lower forms of life in accordance with a general law of modification of structure by environment, and forecasts the accidental variation, the struggle for existence, and the survival of the fittest that play so large a part in the Darwinian theory. This doctrine of evolution is supplemented in the field of comparative anatomy by interesting observations

on the similar laws which govern the development both of plants and animals, and on the analogous structures and functions which occur in both animal and vegetable forms of life. We mentioned also Empedocles' physiological studies of reproduction and nutrition, his observation of sex in plants, and his theory of respiration as related to the movement of the blood which verges on Harvey's discovery of circulation.

In the realm of physiological psychology, we should especially note his famous theory of sensation as a perception of like by like, and the essential correctness of his suggestions regarding the nature of taste, smell, and hearing.

The undeveloped state of his views on the relation of perception to reason does not warrant us in attributing to him a theory of knowledge or any preoccupation with the problems of error and of Appearance *vs.* Reality.

## II

The next philosopher to whom we come is Anaxagoras. Born about 500 B. C. of a noble family of Clazomenæ, a town not far from present-day Smyrna, he was somewhat older than Empedocles. But, as a passage in Aristotle may mean that his system was matured and published after the appearance of Empedocles' poems,[56] and as his views mark an advance in the development of the atomic theory, we are justified in having deferred our consideration of his teaching. He seems as a young man to have become fascinated with philosophy, and to have exhibited some of the symptoms popularly believed to be characteristic of this passion. Many anecdotes recount his amiable peculiarities. For love of knowledge he is said to have neglected his worldly goods and at last to have turned his property over to his relatives. Unlike most of the other philosophers whom we have been considering, he took no interest in the politics of his city. When reproached for this lack of public spirit he replied by pointing to the sky as the fatherland which he loved; and again when asked what he had been born for at any rate, he answered, to gaze at the stars. All in all he

[56] Burnet, *Early Greek Philosophy,* 3rd ed., p. 261, note 1.

seems to have been like Thales, a somewhat eccentric, absent-minded, Johnny Head-in-Air sort of person, very much wrapped up in his own thoughts. That these were kindly, as well as profound, is to be seen in the desire expressed in his will that the children of Lampsacus, the town where he had passed his last days, should be given a holiday from school, each year, on the anniversary of his death.

The life of Anaxagoras is chiefly identified with Athens and with the splendors of the Periclean age. In discussing Melissus in his rôle as a Samian admiral, we saw how Athens, under the leadership of Pericles, transformed into a powerful maritime empire the Confederacy of Delos, which had started as a mere defensive alliance of certain coast and island states against possible further aggression on the part of Persia. The reduction of the greater number of her co-partners to the condition of vassals had been hastened by the transfer of the common treasury of the League from Delos to the Acropolis, and by the lazy habit, into which all but a few of the stronger confederates fell, of paying Athens tribute money in return for protection, instead of contributing a quota of ships and men to the common safety.[57] Thus the confederate fleet, being almost entirely Athenian built and controlled, not only secured the League as a whole from foreign aggression but also insured the naval supremacy of Athens over her so-called allies, and made her the capital and mistress of a far-flung empire of isles and coast-lands which encompassed the Ægean, and had its outposts in the Euxine and the Propontis, in Egypt, Phœnicia, and Sicily. Under the ægis of her sea-power a great expansion of trade and commercial prosperity took place, of which she got the lion's share. And as she felt justified, on the whole, in reserving for purely home uses any surplus of the tribute which might remain after the obligation of protection had been fulfilled, she quickly accumulated both in private fortunes and in public treasure the wealth which has always been a prerequisite of all the great "floreats" of civilization.

At the same time the opportunities and responsibilities of an imperial position unfolded the capacities of the extraordinary

[57] *Cf.* Thucydides, I, 99.

Athenian genius. By nature and education the Athenians were a nation of energetic, enterprising, and adventurous businessmen who loved novelty, experiment, and risk. But this commercial and practical flair for making a living was enlightened by qualities of mind and taste which taught them also how to live. It was inborn in them to perceive and prefer the beautiful, and to feel that the noblest of human satisfactions lay in resetting the world as a stage to the living of life as a fine art. Their passion for beauty was, however, reinforced and steadied by an almost sensual pleasure in thinking. They loved just for the "*frisson*" it excited, the sensation of reflecting and knowing. By instinct, as it were, they were excited and guided to the use and enjoyment of their minds, not as a mere economic tooth and claw for gorging the material wants of existence, but as a discriminating and delicate palate for apprehending and savoring the subtle delights of the flavor of human life. This innate sensitiveness to beauty and to the uses of the intellect as an instrument of pleasure permeated all classes and interests. The average intelligence of the whole mass of Athenian citizens in town-meeting assembled has been ranked above that of the British House of Commons forty years ago, when its members were still almost altogether aristocratic by birth or university bred.[58] And the perfection and universal dissemination of taste has never since been even approached, save perhaps by the Japanese in the days before the keen edge of their instinctive perception and creation of beauty had been blunted and turned by contact with Europe and America. Only in the courts of the Ionian tyrants, and of the culture-mad despots of the Italian Renaissance can we find the peer of the spirit with which at Athens a whole people was suffused.

Of all this wealth and genius Pericles made himself the master and the center. Like those other great patrons of splendid ages, Augustus Cæsar and Lorenzo the Magnificent, he utilized the old republican form and machinery of government for the maintenance and exercise of his power, but he reigned no less

[58] Freeman, *History of Federal Government,* I, p. 37 *et seq.* Quoted by Mahaffy, *Social Life in Greece,* p. 255. *Cf.* Ferguson, *Greek Imperialism,* pp. 57, 65.

and perhaps even more truly than they. "Deriving authority from his capacity and acknowledged worth, being also a man of transparent integrity," says Thucydides, "he was able to control the multitude in a free spirit; he led them rather than was led by them. . . . Thus Athens, though still in name a democracy, was in fact ruled by her greatest citizen." [59]

Of the imperial destiny of Athens Pericles dreamed a great dream. Her glorious part in the Persian War still fired the imagination of men. Even the Theban Pindar, though during the struggle he had been pacifist and neutral to the point of uttering no protest when his own city welcomed the Persians, had cried out in spite of himself, "O shining, violet-crowned city of song, great Athens, bulwark of Hellas, walls divine." [60] And Themistocles, whose will and daring had sustained and helped bring her safely through the ordeal, had seen her enthroned in the splendor of her victory as the capital of a united Greece and perhaps of the whole Mediterranean world. This vision of political dominion Pericles enlightened with the ideal of spiritual supremacy. He saw Athens also crowned with laurel, and exalted in honor, the shining capital of civilization. It was her mission to be the "school of Hellas," as he calls her in his famous Funeral Oration, privileged to teach by her example how noble man and how beautiful the world might be. The test and justification of a democracy, he felt, lay not in leveling all men into commoners but in elevating them all into noblemen. Equality, if it implied that those who possessed breeding and manners, taste and intelligence, were no better than those who did not, was a lie. Freedom meant not the evasion of aristocratic ideals but a permission to a whole people to be ranked as gentlemen if, but only if, they would behave as such. That democracy should and might mean aristocracy made universal was, as Pericles saw it, the Athenian message to the world.[61]

But when it came to realizing this ideal the Athenians were not altogether as clay in the potter's hands. They were quick

[59] Thucydides, II, 65 (trans. Jowett).
[60] Fr. 76 (trans. Murray, *Ancient Greek Lit.*, p. 178).
[61] *Cf.* Ferguson, *Greek Imperialism*, p. 64 *et seq.*

in learning to think imperially in matters of domestic and foreign policy. Like the Japanese, they were conscious and proud as a people of their innate sensitiveness and amenability to the refinements of human life and of the distinction which these thoroughbred qualities, inbred in the multitude, conferred upon them. They shared Pericles' patriotism and his enthusiasm for pouring out their public and their private wealth in the service of the city for which they had had so lately, and were so soon again, to pour forth their blood.[62] And they rejoiced with him at seeing their love of Athens and their pride of empire, their genius and their ideals, at last expressed and enshrined in monuments whose ruins still remind the world that beauty was once within the reach of man.

Across this splendor, however, there lay a shadow, all the darker for the contrast, through which even Pericles in the end could not see his way. The keen curiosity of the Athenians, their hospitality to new ideas, their delight in looking on at life, their passion for thinking and reflecting—all these were stopped short of science and philosophy by an indifference to inquiry and speculation, and by a blank wall of theological traditionalism and intolerance which forbade the spirit of investigation to trespass on the grounds of the established religion. In their dealings with the divine the Athenians were as old-fashioned, as bigoted, and as superstitious, as they were enlightened and progressive in their love of surveying and embellishing the spectacle of human existence. Their curiosity, their restlessness, and their enterprise urged them to extend their empire to the uttermost ends of the earth, but woe to the adventurous mind that reported any new thing of the Gods whom the city worshiped!

Athens, then, in spite of her artistic temperament, her culture, her love of thought and conversation, was no place for untrammeled scientific and philosophic investigation. Not only her out-and-out philosophers, but her philosophic poets suffered from the presence of these forbidden topics; just as in modern times, in Anglo-Saxon countries, both literature and science have been impeded by a constitutional fear of countenancing any

[62] *Cf.* Murray, *Four Stages of Greek Religion,* pp. 96, 97; Bury, *History of Greece,* Vol. I, p. 398 *et seq.*

investigation or facing any truth which might shock British respectability or corrupt a belief in the superiority of American ideals. This may be the reason why Athens, in spite of her brilliancy and her attractions as an imperial capital, failed to attract or to hold so many brilliant minds. The charm of the Periclean court could not persuade the historian Herodotus to settle definitely there, and the philosopher Democritus, rich and free to live where he chose, preferred to travel or to live at Abdera. Even the poet Æschylus, it has been suggested, for all his piety and Miltonic Puritanism found the atmosphere too stifling, and used to visit Sicily for air. Perhaps, too, Euripides found the concealed irony and skepticism with which he edified the religious majority, and entertained the cynical minority, of his audience, an insufficient vent for his revolt, and sought relief at last in the *grandes espaces* and the *pleins airs* of the New World of Thrace.[63] Sophocles was more fortunate in having in Pericles a near-by refuge.

In this matter of religious intolerance Athens contrasted very unfavorably with the Greek cities of Asia Minor and Magna Græcia. It may be, as we remarked in discussing the Milesian School, that the "continental" situation of the Ionian cities and the proximity of Sicily and Southern Italy to the foreign civilizations of Carthage and of the Italian peoples accustomed them to the presence and importance in the world of non-Hellenic institutions, ideals, and Gods, and mellowed them with a cosmopolitan sense of the relativity of morals and theologies.[64] In any case the Ionians and the Magna Grecians were keen investigators and speculators by nature, fearless of any truth to which scientific or philosophic inquiry might lead. Among them one could hold and express what religious or irreligious beliefs one chose without danger of molestation or ostracism, and even with no uncomfortable feeling of being out of tune with one's environment.

Athens, on the other hand, whose immediate neighbors were all and wholly Greek, and, with the exception of Corinth, rather hidebound, lacked cosmopolitan experience, and was not to be

[63] *Cf.* Holm, *History of Greece,* II, p. 293.

[64] *Cf.* Lange, *History of Materialism* (Eng. trans., 1877), I, p. 33.

shaken out of her theological provincialism and her old-fashioned ideas even by her imperialism and the new and close ties which knit her to broad-minded and free-thinking dependencies. If anything, the new contacts only settled her the more firmly in her old-fashioned ways, and excited against Ionian ideas and influence a prejudice very similar to that which the "one-hundred per cent American," to use a cant and popular American phrase, entertains against European culture in general, or the insular Englishman used to express against "atheistic," "immoral," and "frivolous" France. The Ionian, however, who crossed the Ægean to Athens had his revenge. Save that to-day the forbidden topic about which no disturbing truths may be aired or unearthed is the nature of the good rather than of the Gods, he must have been oppressed with much the same feeling of loss of essential liberty as astonishes the Parisian on arriving in London, or as half amuses, half irritates, the European on entering the United States.

A man with such vision as Pericles, and master of a people possessed of such virtues and shortcomings, naturally became the rallying point not only for the writers and artists who expressed the Athenian genius, but also for the liberals and free-thinkers who were suppressed by the Athenian narrow-mindedness. So it was that both deliberately and unconsciously he gathered about himself the brightness of the Athenian glory, and became the focus of the splendor to which he has given his name. In forming this brilliant circle he owed no little help and inspiration to his mistress, or perhaps we should say, in view of his constancy and the fact that the Athenian law forbade legal marriage with foreigners, his morganatic wife, Aspasia. She was a Milesian, whose past, although it had been associated only with a very select few, was still not altogether above reproach. But she was faithful to Pericles, and as she added charm, wit, intelligence, a genius for conversation (as the Europeans, and particularly the French, understand it), and a talent for housekeeping, to her beauty, she made of herself one of the famous hostesses of all time. In her skilful hands the house of Pericles became the stage for a "salon" which was

frequented not only by all the great men, but by the more emancipated women of the day.

Into this circle Pericles tried also to draw distinguished "colonials" and foreigners, just as the despots of the Italian Renaissance vied with one another in attaching famous men to their courts, irrespective of nationality. But he had in mind a nobler goal than the mere acquisition of another lion for the Periclean or even the Athenian garden. He wished, if possible, to overcome the blind spot in the point of view of his fellow-citizens by subjecting them to a course of Ionian enlightenment. It was not that he underestimated their virtues of piety and patriotism or failed to appreciate their extraordinary sensitiveness to beauty. But he saw that without liberality of thought and interest in science and philosophy, their experience of and reflection upon life must necessarily be one sided and incomplete. If only he could graft the Ionian breadth of vision and mind upon the purity of taste, the physical energy, and the pride of city and empire which characterized his countrymen, then his dream of Athens as the "school of Hellas" and the capital of civilization as well as of the world would be near to coming true.

Pericles, however, had set himself a task beyond both his own powers and the capacities of his people. No nation, however quick, versatile, and brilliant, could change its spots and assimilate a new culture at the behest of one man, or within the span of a single lifetime. The Athenian defects were shortcomings which can be overcome only by many generations of experience, and disillusionment, and reflection, and slowly increasing perception of "what things can and what things cannot be," not to speak of what are really worth while.

The immediate result of Pericles' superior field of vision and profundity of insight was that he himself got the reputation of being an "Ionio-maniac," and that those who shared his views laid themselves open to the vague and dreadful charge of being "un-Athenian" in spirit, and were correspondingly suspect in the eyes of the mob. Such accusations proved a powerful weapon in the hands of his enemies, who let no opportunity slip for wounding him politically by charging his friends with impiety towards the Gods of the city—or to put it in modern

terms, towards the social and moral shibboleths of the people—and by thus seeking to arouse and enlist against him the provincial patriotism of the Athenian. Aspasia naturally was a favorite object of disfavor. Next to the nature of the Gods the Athenians were perhaps most bigoted about the position of women, who, they thought, should be neither seen nor heard, but kept in their proper position of almost Oriental seclusion in the home. Aspasia defied their two pet prejudices. Her unveiled and independent behavior, her habit of conversing familiarly and on equal terms with men, and worse still, her habit of inviting the legitimate wives of respectable citizens to do so too, scandalized the old-fashioned, and sowed seeds of feminism in Athenian households which brought the scandal home. These loose foreign ways coupled with her Ionian liberalism, her patronage of dreadful, free-thinking scientists and philosophers, and her vulnerable past rendered her a popular target for scurrilous jest and even for serious, if malicious, attack. Once indeed she was haled into the courts on the double charge of impiety and of using her salon as a means of procuring other men's wives to be Pericles' mistresses; and only Pericles' eloquence and influence secured her acquittal.

But who were Pericles' friends and the frequenters of Aspasia's salon? In order to answer this question, let us drop in and look about for a moment at one of Aspasia's evenings at home. The first to be pointed out to us would very likely have been the sculptor Pheidias. He was Pericles' right-hand man, so some friendly social reporter might have informed us, and his minister, as it were, of fine arts and public works. Together they had worked out the plans for making Athens so beautiful, and it was he who had supervised all the laying out of the building. He had "done" with his own hand the frieze of the Parthenon and the great statue of Athene, all ivory and gold, up on the Acropolis. Now he was just home from Olympia, where he had been working on a colossal statue of Zeus. Those who had seen it said it was so wonderful that when you stood before it you forgot everything else—even all your own troubles and fears. Pheidias' position, though, was at the moment just a bit shaky. He had shocked and offended a lot of people by carving a figure of Pericles fighting a centaur on

the shield of Athene, which was thought quite blasphemous. The scandalmongers, too, were spreading the report that he had stolen some of the gold-leaf with which the statue was covered. The same silly *canard* had got about at Olympia also. It was a pity, for the people were so touchy and bigoted in religious matters. Let a story of that sort get going, and a man, no matter how high up, might easily land in jail.

The four men over there, the reporter might have continued, as our attention wandered from his gossip, were Ictinus and Callicrates, the planning and supervising architects of the Parthenon, and Mnesicles who planned the Propylæa by which one mounted the slope of the Acropolis and entered the precincts of the temple. Perhaps we had noticed a little temple to Victory on the right as we went up. Callicrates had done that also. The fourth man was a compatriot of Aspasia's, Hermodorus by name, a philosopher as well as an architect. Very likely they were discussing the merits of his new rectangular scheme of city-planning—a novel idea which he had got from the East and was applying at the Piræus down by the docks, and also at Thurii and Rhodes.

The man to our left was the poet Sophocles, a great personal friend of Pericles and one of his generals in the Samian war. He had done well enough in handling reinforcements and supplies, but he had had to be reprimanded for mixing business and pleasure, and when left by Pericles to conduct the siege he had been badly worsted by the philosopher Melissus, who commanded the Samian fleet. He had written, as we probably remembered, a tragedy called "Antigone" to celebrate his promotion. Talking with him were a fellow-tragedian, Ion, who was a colonial from Chios, and Damon, one of the most brilliant and cultivated men in Athens, a specialist in the theory of music, and reputed to have great influence with Pericles. Athens had another good poet, too, named Euripides, but he persisted in living over at Salamis, wrote his plays, they said, in a cave by the sea, and could not be persuaded to go into society or take any more part in public life than he had to.

Did we see the man just coming into the room? That was the well-known traveler and historian, Herodotus from Hali-

carnassus over in Asia Minor. He was always "on the go" and never stopped in Athens long at a time. It was whispered that he was employed by the government as a secret intelligence agent and kept them furnished with much more valuable information about foreign countries than was allowed to appear in the instalments of his book. Speaking of historians, the young man just taking leave of Aspasia was called Thucydides. His family were notoriously anti-Periclean, and he belonged to the opposition. But he much admired Pericles personally, and, it was said, meditated imitating Herodotus by writing a history of the times.

Had we noticed the group at the end of the room gathered about Pericles, who were discussing so vehemently among themselves? They were mostly scientists interested in the investigation of natural phenomena, and Sophists or teachers of rhetoric who instructed young men how to argue in the law-courts and make telling speeches in the Assembly. They were almost all out-and-out foreigners or from the dependencies. The tall, fine-looking man was Zeno of Elea, a pupil of the philosopher Parmenides. He could talk you into believing that black was white, and that motion and multiplicity and everything else one commonly accepted were quite self-contradictory and did not really exist. The man with whom he was arguing was a Sicilian Sophist from Leontini, Gorgias by name.[65] No wonder they seemed rather heated in their discussion, since Gorgias had beat him at his own game and demonstrated by his own methods that "what is" really is not. Standing beside them was another Sophist, Protagoras, a Thracian from Abdera. He said really quite dreadful things—that there is no such thing as a universal standard of right and wrong, for instance. And it was rumored that he had expressed uncertainty as to whether the Gods existed or not. He had better beware. Statements of that sort were apt to get one into trouble at Athens. The short, ugly, snub-nosed youth listening to them was called Socrates. He was of no birth, but Pericles

[65] This is, of course, an anachronism. Georgias did not reach Athens till after Pericles' death. But he was already famous at Leontini and is part of the brilliance of the Periclean Age.

and Aspasia were the last people to care about the sort of thing if a man were well-mannered, intelligent, and interesting. He was very brilliant, and was developing a habit of walking round the streets questioning people and showing them—and the by-standers—how inexact their ideas were and how little they really knew. Finally, we must certainly have a look at the older man by Pericles' side. He was an Ionian scientist whom Aspasia, it was said, had got Pericles to invite to Athens nearly twenty years ago. Pericles and he had been inseparable friends from the first, and he was supposed to have more influence with the great man than even Damon or Pheidias. He was also reputed to be largely responsible for Pericles' liberal and pro-Ionian ideas. The common people, however, who thought that Attica was the Gods' own country and all foreigners, particularly from overseas, were decadent, made fun of him. They had nicknamed him "Brains" [66] because he had written a book showing that Mind was the stuff which set the world going. You could buy it for next to nothing in the market-place. He had also declared in his book that the sun was not a God but a bit of fiery iron about the size of the Peloponnesus. This second statement was no joking matter. That sort of thing might be said and written perhaps in degenerate and atheistic Ionia, but god-fearing Athenian manhood would not stand for it. It had already raised quite a hue and cry among the pious and the orthodox. The yellow-press comic poets could be counted on to take it up. For that matter there was a story going the rounds that the opposition would make it the occasion for another anti-Periclean demonstration. He would be brought to trial for impiety and his association with Pericles would be used as a means for inflaming religious prejudice against the statesman. What was his name? Anaxagoras, son of Hegesibulos, from Clazomenæ.[67]

Had our friend the social reporter poured all this gossip into our ears, he would have been substantially correct. Pheidias

[66] This would appear a defensible translation of "Nous," used as a derisive nickname.

[67] The poetic license of these paragraphs and such anachronisms as have resulted demand perhaps apology.

was soon to be accused of embezzling part of the funds set aside for public works, condemned, and thrown into the prison where he died. And within a short time Anaxagoras, too, was to be brought to trial for the impiety of his utterances about the sun. That he had also made derogatory statements about the divinity of the moon as, for instance, that it was made "of earth and had plains and ravines in it" [68] rendered his case all the more serious. He, too, was condemned and imprisoned. But in some way he escaped, perhaps with Pericles' connivance, and fled home to Ionia. In three years' time Pericles himself was dead of the great plague which devastated Athens in 429 B. C., having lived to see the first stages of the long war that was to end in the dissolution of the Athenian Empire and the temporary reduction of Athens herself to a second-rate power. Anaxagoras did not long survive his friend or the age of which he had been one of the chief glories. He had taken refuge in the Milesian colony of Lampsacus, and there he died honored and mourned by the adopted country men of his exile and old age. As a memorial to him an altar dedicated to Mind and Truth was set up in the market-place and the little schoolboys were given each year the holiday he had asked for them.

We ought not to be less harsh, but we may be less hasty in our judgment of the Athenians' conduct towards Anaxagoras, if we reflect upon the history of our own times. We do not need to go back to Roger Bacon writing his scientific discoveries and theories in cipher in order to be safe, or even to Galileo recanting on his knees before the Inquisition his statement that the earth and the other planets revolve about the sun. We have only to look back some sixty years in England to the reception accorded the Darwinian theory of evolution and the attitude adopted towards its supporters. It was safe by that time to say that the sun was not a God but a fiery mass many times larger than Peloponnesus, and even that it did not revolve about the earth. But it still required courage and a willingness to brave disagreeable incidents to maintain that man was not specially created by a God, but was descended along with all other vertebrates from lower forms of life, and had outstripped

[68] Burnet, *Early Greek Philosophy*, 3rd ed., p. 271 (Fr. 10).

his brothers and cousins only by the workings of a chance and a natural selection which had sharpened his brains. Nor should we forget that there exist even to-day in the United States institutions of learning where exile is the penalty for advocating the evolutionary theory and that as late as 1922 the teaching of it came within an ace of being forbidden by law in the State of Kentucky. Another recent equivalent of the Athenian temper towards Anaxagoras is to be found in the curious state of mind, half bigotry, half panic, into which even the educated classes can be still thrown, most noticeably, perhaps, in America, by the mere question of any new discovery or hypothesis in the field of political and social science.

Anaxagoras seems to have received his first lessons in philosophy from instructors who counted themselves disciples of Anaximenes and successors to the Milesian heritage. But his opinions, like those of Parmenides and Empedocles, are to be understood as a reaction against his early teachers. In his divergence he was swayed by the doctrines of the great Eleatic. He found it as impossible as did Empedocles to escape the conclusion that there can be no such thing as coming into and passing out of being, and that therefore the quantity and properties of the World-Stuff must be invariable. And he was equally convinced that no real thing could turn into another, and that the apparent change of quality and transformation of natures which we see going on about us could not be taken at its face value, but required explanation.

At the same time, he was no more prepared than Empedocles to accept the extreme view of the Eleatics that change and multiplicity are false opinion and illusion, pure and simple. He preferred to steer the middle course already charted by the Sicilian and to reduce qualitative alteration to terms of the movement and transposition in space of fixed and unalterable elements. "Nothing," he tells us, "comes into being or passes away, but there is mingling and separation of things that are." We should therefore "be right to call coming into being mixture, and passing away separation." [69]

So far so good. Empedocles had helped him see his way out

[69] Fr. 17, Burnet, *Early Greek Philosophy,* 3rd ed., pp. 260-1.

of the woods. But once in open country again Anaxagoras felt that Empedocles was not following the right path. The four substances, Fire, Air, Earth, and Water, were too hard and too definite, too "divided and cut off from one another with a hatchet," [70] as it were. Moreover, they were too few. It was well-nigh impossible to make only four basic elements, however delicately mixed, account for all the infinite variety and complexity of phenomena. Nor could their sharp outlines afford a sufficient explanation for the haze, the indeterminateness, the "atmosphere," in which the countless objects and aspects of the phenomenal world are blurred and confused and melted into one another.

After all, thought Anaxagoras, perhaps there was something in the old notion of an indeterminate World-Substance such as his first teachers had impressed upon him. Such a substance need not be necessarily one and continuous. It might be a collection of particles free to move about in space. Moreover, its indeterminate character need not be merely a matter of quantity. It might be conceived as also qualitatively boundless—an iridescent mass shot through and through with every one of the innumerable qualities that we perceive in things, in somewhat the same way that opposites were mingled in the Heracleitan Fire. In that case no one portion or particle of it, however small, would be simply hot, or simply white, or simply sweet. Each molecule would be, as it were, a tiny prism possessed of all the iridescence and variety of the whole mass, hot and cold, black and white, bitter and sweet, all at the same time and fused beyond distinction into one. Only, in one particle there might be more sweetness than there was bitter or heat or cold; in another more cold than heat or taste or visibility; in still another more white than black or temperature or appeal to the tongue. The first we should call after its predominant quality, a particle of cold, the second, a little bit of sweetness, the third a molecule of white. Similarly any particle of the World-Substance with which we came in contact we should name after the quality in it which struck our senses most forcibly. But the prevalence in a thing of one property over

[70] Fr. 8, Burnet, *op. cit.*, p. 259.

all others should not cause us to forget that it, along with every other piece of World-Stuff, possessed to some degree all the qualities of the whole. "In everything," as in a well-shaken cocktail, "there is a portion of everything." [71]

These particles of mingled quality were called by Aristotle "homœomera," or things whose parts are of the same nature as the whole. The technical vocabulary of philosophy has taken over the word and its application, and perpetuated them. We need not, therefore, be dismayed if we meet now and then in philosophical literature with references to the "homœomera," or, to adopt a phrase used by later writers, the "homœomeriæ," of Anaxagoras.

We have used the words "quality" and "property," in order to express in our own thought and language the idea which Anaxagoras seems to have in mind. But we should do so advisedly. The distinction between a "thing" and its "qualities" which to us is so familiar and natural was still vague and little felt by philosophers. They made it, of course, continually, but unconsciously, when they used nouns and adjectives as different parts of their everyday speech; but the grammatical distinction had not yet received a philosophical meaning and application. It had occurred to Anaxagoras as little as the differentiation of mind from matter or of space from stuff had occurred to his Milesian forbears. These broader distinctions were, as we have seen, only just beginning to emerge from an idea of World-Stuff in general which was mind, life, matter, solidity, space, and everything else through and through and "all over." The more technical and sharply defined opposition of a "substance" to its "properties" required an even longer period of reflection to mature it.

So it is that we find Anaxagoras confusing in his particles of World-Substance the two notions of "property" and "thing." Hot, cold, dry, moist, and the like are real stuffs. The iridescence of qualities with which each prismatic particle shimmers is conceived as a complete fusion in the World-Stuff of many different material ingredients.

To what extent Anaxagoras carried this profusion of basic

[71] Fr. 11, Burnet, *op. cit.*, p. 259.

qualities or elements is a mooted point. An ancient commentator represents him as explaining the process of nutrition on the hypothesis that bread and water and other food contain minute particles of hair, veins, arteries, sinews, bones, and the other parts of the body.[72] Many modern historians, arguing from this passage, have imputed to him the belief that there are as many different sorts of molecules as there are kinds of natural objects. Fire, for example, would be composed primarily of fire molecules, but it would also contain, to a minor degree and imperceptibly, particles of blood, and hair, and water, and bread, and wheat, and every species of substance. This view, however, has been recently challenged. Anaxagoras, it is held, had in mind simply the old tables of opposites, such as hot and cold, light and dark, with which the Milesians, the Pythagoreans, and Heracleitus have already familiarized us. These are the primary qualities or stuffs, as it were, which are so interfused that no particle of the World-Stuff can be found which does not contain them all. Other kinds of things, such as the four elements of Empedocles, or hair, or flesh and blood, must rather be regarded as secondary combinations which owe their different natures to different proportions and arrangements of the primary molecules.[73]

Anaxagoras had now reached the point where the kaleidoscopic change and complexity of the phenomenal world could be reconciled with the Eleatic indestructibility and the invariable quantity and character of the World-Stuff. Like Empedocles, he had pulverized Reality into many particles which, though indestructible and unalterable in nature, possessed different characteristics and could shift their positions in space. And like him he had seen that creation and destruction and transformation need not imply absolute coming into or passing out of being, but could be explained as a mere mixture and separation of uncreated, indestructible, and unchangeable elements. Moreover, he had improved upon the crudeness of the Empedoclean theory by expanding the sum of primary differ-

[72] Aet. Plac., I, 3 (Diels, *Doxographi græci,* 279).

[73] For a discussion of this point, *cf.* Burnet, *Early Greek Philosophy,* 3rd ed., pp. 262-5.

ences and elements from four to an indefinite number, and had thus provided a broader and more subtle ground for the extent and *nuances* of the variety perceived by the senses.

At this point also, he found himself faced with the problem which confronted Empedocles in the same circumstances. Mixture and separation imply motion. But where does motion come from? In answering this question he again followed Empedocles' lead. He isolated and located in a particular element the energetic, self-moving, aspect of the Universe, which the Milesians had taken for granted, along with consciousness, matter, space, and the rest, as one of the universal undifferentiated characteristics of the World-Stuff. This dynamic substance was inherently active and had the power of setting in motion the other kinds of molecules, which, if left to themselves, would be inert. But whereas Empedocles had posited two such stuffs, Love and Strife, Anaxagoras reduced the number to one. And when he sought to identify this stuff with some one of the qualities or elements with which we are acquainted he found its alter-ego or "twin-soul" not in a physiological instinct or mystical emotion, but in the thinking and reasoning activity of life and consciousness.[74] The stuff which possessed the power of moving other things was perhaps most naturally the stuff which possessed the power of knowing them. At any rate, Anaxagoras located his active element in Mind.

Mind, however, in spite of the suggestions the name has for us, was quite as material as Love or Strife or as the Fire of Heracleitus or the World-Stuffs of the Milesians. We should be almost justified, indeed, in using the term "Brains" as a serious translation, since it is the only word in English that mixes up mind and matter in a single stuff in just the Anaxagorean manner. The one feature which distinguished Mind or "Brains" from other substances lay in the fact that its particles were "straight gray matter," so to speak, exempt from the alloy of all other qualities to which common elements were subject. A molecule of Mind contained nothing but Mind. It had no trace of hot or cold, or black or white, or hair or blood or wheat about it. It "is mixed with nothing but is alone, itself

[74] *Cf.* Cornford, *From Religion to Philosophy*, p. 154.

by itself." [75] And in comparison with other kinds of particles it was aristocratically fine and thin. Its exclusive nature, however, did not condemn it to dwell altogether apart. Being unadulterable it was privileged to appear in the mixed and gay society of some of the other elements, without sullying its purity or incurring even so much as a *noblesse oblige* reputation for return entertainment. "In everything there is a portion of everything except Mind, and there are some things in which there is Mind also." [76] The more favored few which contain Mind in addition to the general intermixture were, as we shall presently see, perhaps animate beings as compared with inanimate things.

But we should be on our guard not merely against imputing to Anaxagoras a belief in an immaterial Consciousness or Reason. Mind, he tells us, "has power over all things, both greater and smaller, that have life . . . and set in order all things that were to be, and all things that were and are not now and that are, and this revolution in which now revolve the stars and the sun and the moon. . . ." [77] Such a statement inevitably suggests to us the Hebraic idea of the spirit of God moving on the face of the waters, and of a divine intelligence creating and controlling the world. We should be careful, however, not to read any such idea into Anaxagoras' thought. The action of Mind in setting the other stuffs in motion seemed to him as unpremeditated and mechanical as the commotion caused in a tumbler of water by the ingredients of a Seidlitz powder seems to us. And the formation of the world due to the spread of the initial commotion was not in any way planned or directed by the cosmic brain-matter. It was a wholly purposeless and blind process, like the series of changes started and sustained among chemical elements by the mere presence of a catalyzer. Both Plato and Aristotle, who believed that purpose was the main factor in the formation and ordering of the world, were severe with him for using Mind as a mere mechanical cause which did

[75] Fr. 12, Burnet, *Early Greek Philosophy,* 3rd ed., p. 259.

[76] Fr. 11 (Mr. Burnet, however, transliterates "Nous" instead of translating it as "Mind").

[77] Fr. 12, Burnet, *op. cit.*

no more than wind the world up and then left it to run by its own mechanism.[78] And Plato doubtless was thinking of him as well as of Empedocles when he spoke of those philosophers who taught that the Universe was formed "not by the action of mind . . . or of any God, or from art, but . . . by chance and nature only."[79] We have then no more right to attribute to him a "teleological" or "design" theory of the activity of Mind than we had to ascribe to him an immaterial view of its character.

Anaxagoras' hypothesis regarding the World-Stuff was now complete. He had found the energetic, dynamic substance to give his inert, unchangeable particles of many kinds the necessary shove and set them going. It remained to fill in the outlines with a description of the formation of the world. This, he tells us, was effected as follows;—In the beginning there was so complete a fusion of all the different particles that no one kind could be distinguished from another. Air and ether, however, which are infinite, predominated in the mixture (here he seems to be thinking of Anaximenes). Mind set a portion of this mass whirling with unparalleled rapidity, and the spinning motion spread little by little and involved larger areas. The speed generated force, and particles of different sorts were separated out from the indiscriminate mixture and brought together with molecules of their own kind. "The dense and the moist and the cold and the dark came together where the earth is now, while the rare and the warm and the dry (and the bright) went out toward the further part of the æther."[80] From the qualities or elements which spin nearest to the center, "as they are separated off, earth is solidified; for from mists water is separated off and from water, earth."

The spinning of the central mass caused the stones to "rush outwards more than water,"[81] and great fragments of rock were flung off and caught up into heaven where they continue to fly round and round the earth. They were set on fire by the

[78] Plato, *Phædo*, 97b. Aristotle, *Metaphysics*, I, 4. 985*a*.
[79] Laws X, 889b.
[80] Fr. 15, Burnet, *Early Greek Philosophy*, 3rd ed., p. 260.
[81] Fr. 16, *loc. cit.*

rotation of the æther, and became the stars, the sun, and the planets. There were also other fragments flung off which were not ignited and are therefore unseen in their revolution.

As to Anaxagoras' exact ideas about the moon we are not so clear. Commentators variously describe him as saying that it, like the sun, is incandescent [82]; that it is a mixture of dark and fiery stuff, the result of which is its shadowy appearance [83]; and that it has no light of its own but reflects the light of the sun.[84] The earth, as in the system of Anaximenes, is conceived as flat and floating upon a cushion of air.

We are also somewhat in the dark as to his ideas regarding the development of life upon the earth. Apparently the distinction between the animate and the inanimate was bound up in his opinion with the appearance of Mind as an ingredient in the composite natures of some of the elements, but not of others.[85] Though Mind is everywhere the same in quality and degree, the amount of it present in the different kinds of molecules into whose composition it enters, or in the secondary combination of these particles, may differ. It is to this difference of quantity and to differences of physical structure that higher and lower forms of life and degrees of intelligence are due. The mind of man, for example, is of the same quality and kind as the mind of a plant—only there is more of it.[86] This doctrine of the qualitative sameness of all life and intelligence, it will be noticed, anticipates the point brought home by the doctrine of evolution, that human consciousness, like the human body, has been slowly developed out of less conscious forms of existence.

Anaxagoras also seems to have had some sort of theory of physical evolution, though we lack a detailed account such as we find in Anaximander and Empedocles. He taught, we are told, that the air contained the seeds of both vegetable and animal life which the falling rain brought down to earth; and also that "animals arose in the first place from moisture and

[82] Hippolytus, I, 8 (Diels, *Dox.* 562). Burnet, *op. cit.*, p. 271.
[83] Aet. Plac., II, 30 (*Dox.* 36).
[84] Hippolytus, *Phil.* I, 8 (*Dox.* 562).
[85] Burnet, *op. cit.*, p. 272.
[86] *Cf.* Fr. 12 end. Burnet, *op. cit.*, p. 260.

afterwards one from another." [87] The superior intelligence of man he laid to the possession and use of hands,[88] which gave a greater scope to the exercise of mind. This association of intelligence and hands may perhaps remind us of the modern discovery that the speech center in the brain is always in the hemisphere which controls the dominant hand—in the left hemisphere in the case of right-handed people and vice versa.

Whether or no he believed in a succession of world cycles separated by periods of chaotic confusion and complete intermixture of the world-particles with one another, is a doubtful question, probably to be answered in the negative.[89] Whether he believed, as Anaximander and Anaximenes seem to have done, in the simultaneous existence of innumerable worlds similar to our own is a matter of dispute. A passage from his writings is preserved which at its face value appears to refer to the inhabitants, both animal and human, the cities, and the cultivated fields, the sun and the moon, and all the rest of the furniture of other systems like our own produced elsewhere by the spread of the spinning movement and the ensuing separation of particles.[90] But although the seeming implication of a plurality of worlds has been vigorously defended,[91] it is only fair to say that it has also been vigorously attacked, and that the passage has been held to refer merely to conditions prevailing, in Anaxagoras' opinion, upon our own moon.[92]

The growth of a specialized psychological interest, which we have noted from time to time, made a further advance in Anaxagoras' philosophy. His theory of sensation was more detailed than that of Empedocles, with whom it seems as if he were carrying on a controversy. To the latter's view that perception was essentially of like by like he opposed the hypothesis that sensation was produced by the stimulation of one opposite by another. Like, he pointed out, could not be affected by like;

[87] Hippolytus, *Phil.* 8 (Diels, *Doxographi græci,* 563). Trans. Fairbanks, *Handbook of Greek Religion,* p. 261.

[88] Aristotle, *Part. Anim.,* IV, 10, 687*a,* 7.

[89] Zeller, *Pre-Socratic Philosophy,* II, p. 358.

[90] Fr. 4, Burnet, *Early Greek Philosophy,* 3rd ed., p. 258.

[91] Burnet, *op. cit.,* pp. 269-270.

[92] Zeller, *op. cit.,* II, p. 359, note 3.

witness the insensibility of the black pupil of the eye to darkness and the indifference of the body to temperatures similar to its own. The dark depths of the eye were sensitive to light, cold was known by the warm in us, warm by the cold, sweet by the sour, fresh by the salt. The same was true of smell and hearing which were due, the one to contact through respiration, the other to the percussion of the air upon the skull, and the consequent reverberation in the brain. Keenness of perception, he thought, was in proportion to the size of the sense organ.

Pain was caused by the contact of opposites, and therefore to some degree accompanied all sensation. It eventually became perceptible when a stimulus was excessive or had been too long continued, as was shown by the disagreeable character of too bright light or loud noises, and the weariness which resulted from prolonged attention to the same thing.[93]

That the senses do not acquaint us with Reality exactly as it is, Anaxagoras also explicitly recognized. They are too weak to perceive the complexity of qualities and elements which is present in every particle of the World-Stuff. For example, if we take two colors like black and white and mix them, the eye no longer perceives molecules of white lying beside molecules of black, but only particles of uniform gray. Similarly, we do not perceive the blackness lurking in the seemingly pure white of snow, or the minute amount of sweetness and of other primary qualities which in reality is mixed with every particle of sour.

This admission of the untrustworthiness of the senses, however, does not warrant us in considering Anaxagoras either a skeptic or a rationalist. The senses, he thought, do not take us the whole way to the truth, to be sure, but they do not mislead us. Their presentations acquaint us grossly, and with the finer detail blurred, with things as they really are, "What appears is a vision of the unseen." [94] Reason supplements them by carrying the process of dissection of phenomena to a point

[93] *Cf. Theophr., De sens.*, 27 (*Dox.* 507). (Fairbanks *Handbook of Greek Religion*, p. 258.)

[94] Fr. 21*a*. Burnet, *Early Greek Philosophy*, 3rd ed., p. 261.

where perception fails, but beyond which imagination continues, to follow it. The mind's eye can still see all the colors in the rainbow-like nature of particles too small for even their dominant tint to strike the physical vision. But Reason, in his view, does not descry a new world of immaterial or "supersensible" realities. It is merely a sort of microscope held to the naked eye of perception, which discovers nothing that the senses might not detect if only they were sharpened.

We may now pause for a moment to sum up our impressions of Anaxagoras. We find him pushing on some distance beyond Empedocles towards the atomistic and mechanical view of Reality finally attained by Leucippus and Democritus. The four passive constituent elements of the Empedoclean World-Stuff are expanded by him into an indefinite number of particles, each one of which shimmers with all the basic qualities, but is predominantly and distinctly colored with that which gives it its name. Each unit of iron, for example, contains also gold, and water, and the like, but we call it iron because there is much more iron in it than there is of any other nature. The particles of Mind, alone, are absolutely pure and unadulterated, and Mind also is the only element which is inherently active and self-moving. Thus the two active elements of Empedocles were reduced to one, and their semi-mythological natures were supplanted by a more scientific and a declaredly material principle.

It is to the initial impulse given by this "Mind-Stuff" that the formation of the Universe is due. In the beginning all the particles of the various elements lay mixed in a chaotic confusion. Then Mind entered into the mixture and set the other particles spinning. This spinning spread throughout the Universe and in a perfectly mechanical manner brought about a separation of the different elements from one another; and gradually built up the world. The sun and the moon and the stars, instead of being divine are merely great pieces of fiery rock, shot off from the original central mass by the whirling motion and set on fire by the rotation of the ether. The remnant of the mass became the earth, which is conceived

as flat and as floating on a cushion of air. It is an open question whether he thought that innumerable worlds of this sort were evolved.

Of Anaxagoras' theory of the origin and growth of life we know only that he thought that the first animals arose from moisture, and then from one another, and that he associated the development of the human intelligence with that of the hand. Of his psychology, however, we are more fully informed. His views on sensation are as famous as those of Empedocles, though diametrically opposed to them. Instead of believing that like was perceived by like, he argued that sensation was caused by the contact and interaction of the qualities in the human body with their opposites in the external world. The inability of the senses to reach Reality was explicitly recognized by Anaxagoras, and some attempt was made to explain it. But he feels that the deficiencies of the senses are compensated by the power of Reason to carry on the process of analysis beyond the point at which perception fails, and to attain a vision of the ultimate constituents and structure of things.

During his last years, Anaxagoras gathered disciples at Lampsacus, and founded a school of philosophy which continued to exist after his death. Apparently, however, his teachings were quickly modified by his followers and tended to revert to the older Milesian doctrine. Archelaus, his successor and the only member of the school whose name and views are specifically known to us, held that the original mixture of all elements and qualities was Air, and that Mind instead of being a pure, unalloyed stuff contained an admixture of foreign particles like the other elements, and like them was suffused throughout the molecules of the airy World-Substance. The Universe arose from the condensation and rarefaction of the World-Stuff, and from the interaction of the two resultant principles of fire and water. All forms of life, including man, also appeared as a consequence of the intermingling of the warm and the cold, and were nourished by the primeval slime. They lived but a short time, and then a process of

generation from one another and of evolution began, in the course of which men were distinguished from the rest.[95]

The same tendency to make philosophy grow backwards and to check the more advanced systems by combining them with more primitive views is noticeable in Diogenes of Apollonia in Crete, whom we mentioned in discussing the Milesian School. He seems to have been a somewhat younger contemporary of Anaxagoras, and like him to have started his philosophic career under the teachers of a Milesian, and particularly an Anaximenean way of thinking. Like Anaxagoras, too, he came to Athens, was made fun of by the comic poets, incurred, because of his opinion, the hostility of the intolerant crowd, and for a time was in danger of his life.

Diogenes held to the Milesian view that the World-Stuff must be one, and argued from the universal and versatile nature of Air that this must be the substance of which all things were made. Rarefaction and condensation he thought lay at the bottom of the process by which the Universe was formed. This combination of the views of Anaximenes and Anaximander he enriched, like Archelaus, with suggestions from Anaxagoras. Air was suffused with Mind which accounts for the life and consciousness, the systematic disposition of the World-Stuff, and the order in the world. Condensation and rarefaction gave rise to many transformations and differentiations "and an infinite number of colors and savors." [96] There was a whirling motion natural to the animate and intelligent character of Air, by which the world was formed, with the earth, probably shaped either like a disc or a cylinder, at the center and the heavenly bodies revolving about it. Innumerable worlds besides our own were created in this way.

Animals arose from the earth. The principle of life and intelligence—warm air—was the same in them all but it did not exist in any two in the same manner. The differentiation of species was incidental to the general process of differentiation going on in the Universe. Like Empedocles, Diogenes was keenly interested in medicine. The principle of life, he

[95] Burnet, *Early Greek Philosophy,* 3rd ed., pp. 359-360.
[96] Fr. 5, Burnet, *Early Greek Philosophy,* 3rd ed., p. 354.

thought, was carried with the blood in the veins and was diffused throughout the whole body, but sensation was located particularly in the brain and was due to the action of the external upon the internal Air.

While dealing with these revivals or persistences of Milesian doctrine we should also perhaps mention Hippo, probably of Samos, who reverted to Thales' teaching that the World-Stuff was Water; and Idæus of Himera who maintained that the World-Substance was Air.[97]

## III

We now pass on to two men, Leucippus and Democritus, whose teachings not only seem like a fulfilment of the prophecies and a solution of the problems which we have so far considered, but also constitute one of the final and most imposing philosophic systems of all time. The atomic and mechanical theory which they first formulated inspired the beginnings, and with no essential changes still guides the development, of modern scientific hypothesis. It persists even in doctrines as revolutionary as those lately propounded by Einstein, and its familiar features may be detected behind the intricate and novel disguise of "point-events" separated in "space-time" by "interval-relations" and following, if undisturbed, "geodesics" or tracks of maximum length in a space in which all straight lines are really curved. The most important of the laws of external nature, if not the only law, we are told by an exponent of this ultra-modern physics, "is the law of atomicity." [98]

Of the two founders of this law, Leucippus is a shadowy figure. His fame and teaching, like the rays of the lesser sun in a double star, have been eclipsed and absorbed by the clearer and brighter light of his pupil Democritus, through which their faint lines have been transmitted to us. He was born, according to a varying tradition, at Abdera, at Elea, at Melos, and, perhaps more probably, at Miletus. The date of his birth is

[97] *Op. cit.*, pp. 351-2. *Cf.* Zeller, *Pre-Socratic Philosophy*, I, pp. 280 *et seq.*

[98] Eddington, *Space, Time, and Gravitation*, p. 199.

not known, but apparently he was a contemporary of Empedocles and Anaxagoras. He is reputed to have been a disciple of Parmenides, and even of Zeno, and it is not unlikely in any case that he should have been acquainted with the views of his neighbor, the Samian admiral and Eleatic philosopher, Melissus.[99] Like Empedocles, then, he must have first imbibed Eleatic doctrine, and later have rejected it in favor of the strong meat of his own ideas. Whether or not he committed his views to writing is not recorded. Our knowledge of him is wholly derived from the comments of ancient writers, by whom his name is always mentioned in conjunction with that of Democritus. Although, then, master and pupil seem to have differed in some minor points, such as the causes of thunder, we may nevertheless treat the Atomic Theory for our purposes as if its light originated in a single and not a binary star.

Of Democritus' life an authentic though scanty biography can be compiled. His own statement that he was forty years younger than Anaxagoras would place his birth about 400 B. C.; and this date, or one slightly later, has been accepted as substantially correct. His native city was Abdera in Thrace, which was settled, as we have seen, by Ionian refugees from Teos about the same time that the inhabitants of Phocæa, fleeing from the Persians, sailed away to Sicily, and thence to Southern Italy, and founded Elea. All sorts of stories are told about his boyhood to illustrate his propensity for philosophy, and the Pythagoreans, Parmenides and Zeno, Anaxagoras, and even the Persian Magi, have all been credited with an important part in his education. But the most direct, personal, and overpowering influence on his views was that of his teacher Leucippus.

With the incidents of his life and death gossip has been busy. Possessed of a rich father, and later, by inheritance, of a great fortune, he was in a position to indulge not only the curiosity natural to every young man to make the *grand tour* and see the world, but also his own particular hobby of gathering in and storing up wisdom. Ancient tradition had

[99] *Cf.* Burnet, *Early Greek Philosophy,* 3rd ed., pp. 331 *et seq.*

it that he not only spent five years in Egypt studying with the priests but also traveled in Persia, Chaldæa, and even India and Ethiopia, and returned well versed in magic and prophecy. He himself is quoted as boasting that he had journeyed more widely than any other Greek, and that he was a better mathematician than were the Egyptian priests. But these reports are not now regarded as authentic, and the extent of his travels is not certainly known. There is even some doubt whether he ever visited Athens. In any case he passed a considerable portion of his life in Abdera, teaching and building up a school of disciples. There are also stories extant that he spent so much money seeing the world that he was forced on his return to take to teaching in order to make a living. Another version represents him as neglecting his property like Thales and Anaxagoras, and as silencing the critics of his unbusiness-like ways by recouping through speculation in oil-presses. Still another tale credits him with having handed over his property to the State in order that the care of it might not distract him from his philosophic and scientific studies.[100]

The latter, to judge from the accounts of his writings, must have been sufficiently preoccupying. An ancient historian rates his literary fecundity next to that of Aristotle,[101] and elsewhere gives an imposing catalogue of his books on physics, astronomy, biology, psychology, ethics, mathematics, and grammar, not to speak of treatises on agriculture, painting, tactics, law, coughing, fever, and the like.[102] Many of the works and fragments attributed to him are, however, regarded as spurious.

Gossip also prolonged his life to the term of one hundred and nine years, and even then could not let him die in peace. When on the point of dissolution he is said to have lasted out an extra three days by sniffing the steam from hot bread,[103] or, as another story has it, by eating honey,[104] in order that his pre-

100 For a compilation and sifting of the evidence relating to the life of Democritus, *cf.* Zeller, *Pre-Socratic Philosophy,* I, p. 208, note 1.

101 Diogenes Laertius, I, 16.

102 *Ibid.,* IX, 49.

103 *Ibid.,* IX, 43.

104 Athenæus, II, 416.

mature death might not prevent the ladies of his household from taking part in the festival of the Thesmophoria. But it is also said that he starved himself to death,[105] that he was killed by lice,[106] and that, wearied with old age, he committed suicide.[107] All in all, the manner of his death was as varied as that of Empedocles. Its date is not known.

Through all this confusion of fact and fancy, however. Democritus stands out as one of the greatest thinkers of all ages. In Græco-Roman times he enjoyed a reputation scarcely second to that of Plato and Aristotle, not only because of his immense and omnivorous learning and his philosophical genius, but also by reason of his mastery of a literary style comparable, in ancient opinion, with that of the Platonic dialogues. Modern criticism, though it has discredited the authenticity of most of the laudatory gossip and diminished the number of the fragments of his works which can be considered genuine, concurs in the general judgment passed upon him by antiquity. It has been said of him that his like is scarcely seen once in a hundred years;[108] that he surpassed "all his predecessors and contemporaries in wealth and knowledge, and most of them in acuteness and consecutiveness of thought";[109] that his ethics may be ranked with the teaching of Socrates;[110] and that the loss of his writings is the "most lamentable that has happened to the original documents of ancient philosophy."[111]

Leucippus, like Empedocles, as we have seen, began his philosophic career under Parmenides' influence, and later revolted from Eleatic teaching. The extent and limitations of his apostasy were also outlined by the system of his Sicilian contemporary. He admitted the force of the argument that Reality cannot come into or pass out of being, and that therefore there can be no real creation or real destruction of World-

[105] Lucian, *Macrobius,* 18.

[106] Marcus Aurelius, III, 3.

[107] Lucretius, III, 1, 1037 *seq.*

[108] Mullach, *Frag. Phil. Græc.* (ed. 1869), p. 338.

[109] Zeller, *Pre-Socratic Philosophy,* II, p. 214 (continuation of note 1, p. 207).

[110] Windelband, *Hist. Anc. Phil.* (Eng. trans. 1899), p. 172; *cf.* Burnet, *Greek Philosophy, Thales to Plato,* p. 201.

[111] Windelband, *op. cit.,* p. 158.

Stuff or any real alteration in its nature. At the same time he shared the feeling that the change, motion, and variety which we see about us cannot be dismissed as false opinion and illusion, pure and simple, but must be explained and reconciled with the Parmenidean views.

Empedocles had solved the difficulty by quartering the solid sphere of Parmenidean Being into the four elements, and then grinding the latter up into particles, free, when driven by Love and Strife, to mix and separate in various proportions and arrangements. Anaxagoras had pushed this method a step further. He had expanded the four elements of Empedocles into an indefinite number of kinds, and had reduced the two dynamic agents to a single stuff which by purely mechanical means set all the other elements whirling. Leucippus now took the final step, which curiously enough in some respects was a step backwards towards Parmenides. He also shattered the Eleatic Sphere to bits, each of which is uncreated, unchangeable, and indestructible. But he did not further follow the example of Empedocles and Anaxagoras by drawing upon the sensible world for material with which to color the broken pieces. He neither divided the fragments into four parts and painted them with the crude elemental colors of fire, air, earth, and water, nor delicately tinted each separate bit with a rainbow mixture of every sort of basic perceptual quality. He rather let them be in all their old Eleatic simplicity and transparency, like fragments, we might almost say, of a broken globe of flawless glass. But just as such bits, although equally colorless, would still differ in size and shape, so in Leucippus' opinion, the Atoms of which the World-Stuff is composed were of different forms and magnitudes, though absolutely alike and homogeneous in all other respects. Again, we can imagine ourselves fitting the pieces of transparent glass together into masses aglow with prismatic lights, or see how drops of the clearest and purest water combine to produce an effect of flat dense color, like the whiteness of snow, or the dead black of a frozen lake, or the deep blue of the summer sea. In like manner, Leucippus felt, simple differences of size and shape, and ever-shifting geometrical arrangements

and combinations might account for the bewildering kaleidoscope of the sensible world with its endless variety, and its ceaseless birth, death, and interchange of qualities and elements and things.

With Leucippus, then, we reach one of fundamental presuppositions of modern science;—that all qualitative difference and change can be expressed and understood in purely quantitative and geometrical terms. Physics, to be sure, has abandoned his Atoms for vortices and strains in the ether, for concentric spheres of ions and electrons, and latterly for "point-events." But the principle he laid down remains unchanged.

We may remember that at this point both Empedocles and Anaxagoras were forced to explain the origin of the motion which by separating and mixing the particles of World-Stuff is an indispensable agent in the formation of the Universe. Leucippus is confronted with the same question. His answer, like his solution of the problem of the World-Substance, is a step both in advance of his contemporaries and backwards to more primitive systems. He rejects the view that the dynamic, active aspect of the world can be traced to and isolated in one or two substances, and that the other elements or particles are, if left to themselves, naturally without motion and inert. Like the Milesians and Heracleitus, he thinks that movement and activity are general characteristics of all things, suffused throughout the entire World-Stuff. The Atoms need no outside agent like mind to give them the initial shove which sets them going, or like Love and Strife to keep whipping them into continued activity. They are themselves naturally in motion. The fact, we might say, of their motion and activity, is just as fundamental as the fact of their existence. There they are, and there they move—from all eternity. Had we persisted in asking Leucippus a reason for their movement, he would doubtless have retorted by asking us upon what grounds we considered them naturally inert, and for a reason why they should *not* move. Here, again, Leucippus lays down another presupposition of modern science. Physics can no more get behind the existence of motion than it can that of

matter. Movement, activity, occurrence, "point-events," are simply there. To ask why they are there is tantamount to asking why Being exists.

The contribution, however, for which Leucippus is most famous is his clear and explicit distinction between the World-Stuff and empty space. Parmenides, it will be remembered, had denied the possibility of the existence of a void or vacuum, on the ground that the absolutely empty is mere nothingness and that it is a contradiction in terms to say that nothing exists. Space, then, is packed full of stuff. But if it is packed full of stuff, there is no room for movement. Hence motion does not exist, and the appearance of it is false opinion and illusion. Empedocles and Anaxagoras had dodged the issue. Apparently they accepted the doctrine that empty space cannot exist, but assumed that movement can take place without it. But they never raised or discussed the point, or justified their own position.

Leucippus, however, meets the point squarely. Motion, he feels, is impossible without empty space. "What is" can only move in "what is not," and can be no more real than that in which it lives and moves and has its being. Or, to put it the other way round, the empty space which is the fundamental condition of the liveliness and movement inherent in the Atoms must be no less real than they. In a word, Reality is Atoms moving in sheer emptiness.

This sharp distinction between the World-Substance and the space through which its particles move suggests closer definition of the Atoms. If they are absolutely simple and homogeneous, like the Eleatic Sphere, they cannot contain any empty space within themselves; for in that case they will not be pure stuff, but a spongy mixture of space and body. But, as Melissus had pointed out in criticizing Anaximenes' theory of condensation and rarefaction, where there is no empty space there must needs be entire fullness or compactness. Hence each Atom must be completely stuffed with substance, or internally solid and "full up." Again, an Atom cannot be divided, for in the first place the process of division could only be effected by thrusting empty space into it and thus destroying

the homogeneous character of its insides, and secondly, division if carried to the limit would, as Zeno had argued, finally crumble it into mathematical points without solidity or even extension. The particles of World-Stuff, then, may be contrasted with space in terms used by Melissus and perhaps borrowed from him by Leucippus. They are absolutely full, a "plenum," whereas space is an absolute vacuum or void.

So far Leucippus in his own right and name. How much further he may have gone in the elaboration of his doctrine we cannot ascertain, for his footprints at this juncture become confused and lost in the deeper and clearer impress left by Democritus. The Atoms, we now explicitly learn, differ from one another with respect to size, shape, order, and position. The diversity of their shapes must be boundless, since only on such a hypothesis can we explain the infinite complexity and variety of the sensible objects composed of them. Moreover, no reason can be found in any case for limiting the Atoms to one set of forms rather than another. On the part played by differences of size, position, and arrangement Democritus does not lay so much stress. Finally, the Atoms have weight, and are heavier or lighter in direct proportion to their size.

By clustering together the Atoms form the things of everyday life. The generation and decay, growth and change, which we see perpetually going on in the world about us, are in reality nothing but the coming together and the breaking apart of such clusters, and the increase in number, the substitution, and the shifting of the particles which compose them.

Because of their different sizes and shapes, the Atoms in coming together do not completely dovetail with one another, but leave cracks and chinks of emptiness between them. Seemingly solid objects, then, are like picture puzzles joggled out of true, though our senses are not keen enough to detect the vacant spaces between the pieces. But the differences of density, hardness, and weight, which we do perceive in things, is conditioned by the nature and number of these chinks and crevices. A large body may be in reality much more spongy and, to put it paradoxically, more full of emptiness than a smaller one, and may therefore weigh less. Again, the empty

spaces may be scattered about in various ways. All the void in a thing may be collected in one or more large holes leaving what stuff there is densely packed, and the object in question comparatively hard; or a less amount of emptiness may make so many little cavities everywhere that though the amount of stuff, and therefore the weight and density, of the substance are greater, the hardness and rigidity are much less. Gold, for example, is one of the heaviest but at the same time one of the softest and most pliable of metals.

The weight, density, and hardness of an object, then, depend upon the arrangement of its Atoms in the Void, and upon nothing else.

The possession of such other properties as color, temperature, taste, smell, and the like, requires, as we shall presently see, a more complicated explanation. But for the moment let us watch with Democritus the building of a world.

Leucippus had already taught that the Atoms require no external agent like Mind, or Love and Strife, to set them going, but are themselves naturally in motion. To this Democritus adds that, as the Atoms have weight, they naturally fall straight down through the Void. Since the Void is infinite and therefore bottomless, to this downward plunge there is no end in space or time. Democritus was wrong, as we now know, in assuming an absolute up and down, but before blaming him we should remember how hard it is for us, in spite of our closer acquaintance with the law of gravitation, not to think of the inhabitants of the Antipodes as walking about head downwards like flies on a ceiling.

In his next step, also, he makes another slip with which we can sympathize. He supposes, as most of us would do except for direct scientific assurances to the contrary, that a heavier must fall faster than a lighter body. Therefore, in his opinion, the larger Atoms are continually overtaking the smaller and running into them from behind. The rear-end and glancing collisions which ensue cause a recoil, and the lighter Atoms naturally bounce higher and tend to be forced upwards.

To these simple primary movements of impact and recoil all the intricate motion and activity of the World-Process

are due. Since the Atoms are indestructible and unalterable no change of any sort can occur in their shape, size, weight, or internal nature, either spontaneously or from their collisions with one another. Nor can their movements be influenced from a distance or actuated by the hidden link of some mysterious "sympathy" existing between different parts of the Universe. They can act upon one another only externally by the immediate contact of blows or pressure; and all they can effect by this direct and external action is to stop or alter one another's previous motions.

But the sequence of movements derived mechanically from the original downward falling of the Atoms and the bouncing which results from the overtaking of the lighter by the heavier, suffice in Democritus' opinion to account for the evolution of the Universe. The interaction of the two motions, in some way of which no description has come down to us, sets up a whirling movement which spreads throughout the downpour and twists the rain into innumerable atomic waterspouts. These vortices tend to sift out particles of similar form and weight from the general mass, and bring them together. But the confusion is too great to permit of orderly and complete expansion.

Atoms of different shapes and sizes impede, jostle, and press one another, and in the long run get hooked and lumped together in all sorts of ways. In many cases, even, things are turned topsy-turvy and the heavier particles remain above and are supported by the lighter. The spots where the hail thickens and the Atoms pile up and bunch and rain down in solid masses are the world-systems, which preserve for a moment their distinct character and their structure, and then dissolve and vanish once more into the stupendous universal downpour of infinite substance through infinite space. Since the storm-area is as endless as the Void itself, and there is no place whatsoever where the Atoms are not falling, the variety like the number of universes formed will be unlimited, although similar systems—others like our own for instance—may also happen to occur. Apparently then, Democritus holds to the doctrine of innumerable worlds in both the senses which we have already discussed in connection with Anaximenes. Anaxi-

mander, Heracleitus, Empedocles and Anaxagoras. An endless number of universes are everywhere and forever being created and destroyed.

The simplicity of the process by which the world-systems ceaselessly shape, maintain, and dissipate themselves in the storm of hailing Atoms is nowhere complicated or thrown out of gear by the interference of chance, purpose, design, or the whim or will of the Gods. "Nothing," says Democritus, "happens at random, but everything occurs according to law and is determined by necessity." [112] In these few words we have summed up in a nutshell the mechanical view of the world which is the basis of modern science. The Atoms fall, and the heavier overtake the lighter, by an internal necessity of their own natures. Their recoil takes place according to what we should to-day call the mechanical laws of the equality of action and reaction and of the angles of incidence and reflection. Their resultant whirling motion is a purely mechanical effect. Similarly, their consequent combinations and accumulations in world-systems, and the successive clusterings and shiftings which build up the internal structure of the Universe follow upon one another with the inevitableness and the precision of clock-work. Given the laws of motion, as Democritus understood them, and every fresh arrangement and transposition is absolutely determined by, and calculable from, the situation which preceded it, and as completely determines the combinations and movements which follow. In short, the innumerable worlds with all their suns and stars, their continents and seas, —dead, it may be and barren as the moon, or vivid and pulsing with all the life of the green earth—are machine-made products pure and simple. They are ceaselessly turned out, finished to the minutest detail, scrapped again to Atoms, and remanufactured, by the tireless running of an infinite automatic factory, which draws the entire motive power for its endless output from its own fall, and falls by its own weight through all eternity.

No wonder, then, that among those whom Aristotle damned

112 Fr. 41 (Mullach, *Frag. Phil. Græc.* Ed. 1849, p. 365).

for neglecting or rejecting purpose and design in explaining the Universe, Democritus

> ". . . . exalted sat, by merit raised
> To that bad eminence. . . ."

But Aristotle's censure, like Milton's description of Satan in "Paradise Lost," has only helped make a hero of an intended villain. For Democritus' analysis of all the differences and changes of quality in sensible objects into simple differences of quantity and changes of place in their constituent parts, is completed, and the development of the atomic theory is given its fundamental and finishing touch, by his doctrine that every change of place is absolutely determined by a law of mechanical cause and effect. These two strokes of his genius reduce to computable terms the otherwise incalculable complexity of the nature and behavior of the everyday world, and clear the way for the great scientific assumption that the World-Stuff can be measured with mathematical precision, and the movements of the World-Process calculated with mathematical certainty. To Democritus, then, we owe the beginnings of the faith in the uniformity and trustworthiness of Nature, which has opened before our eyes the vision of exact, and the vistas of applied, science, and has given us the confidence that "he who hopeth for an hour, may hope for eternity," and may plan largely and build solidly for future generations in that hope.

The ideas which he formulated were not, however, destined to establish themselves immediately. Aristotle set a contrary fashion of explaining events not by their antecedents but by their consequences interpreted as their purposes, which endured for some eighteen centuries. Democritus' teaching, too, was modified and perverted by the Epicureans and in its original form was lost to mediæval second-hand knowledge of the Greek classics. It is a curious irony of the history of philosophy that when Dante, some sixteen hundred years later, found him in the upper circle of Hell, suspended in Limbo along with the other great spirits of antiquity, all that the great poet of the Middle Ages could say of the founder of the mechanical theory was that he "ascribed the world to chance."

But the Renaissance was at hand, and was to burst the gates of Limbo asunder and draw forth the ancient to quicken and enlighten a new world. And in the widespread dawn of the new era, the great double star of Leucippus and Democritus, so long eclipsed by the Aristotelian explanation of things by their purposes, was to rise again as the morning star of modern scientific progress.

Democritus' clear perception of the fundamental principles of science availed him little so far as his views regarding the construction of our particular universe are concerned. These show no advance over contemporary theories, and tend to agree on the whole with the account given by Anaxagoras. The whirling motion of the clustering Atoms drove the heavier down towards the lighter, up and away from the center. The former were massed together into the solid earth, the latter provided the substance of air and fire and the heavens. Some of this lighter stuff lumped together in sticky, semiliquid masses as it rose, and these balls were dried and eventually ignited by the rotation of the air in whose currents they were carried. In this way the heavenly bodies were created. Meantime the earth rolled up like a snowball and became more and more densely packed. As it grew heavier, it wobbled less, till finally its weight settled and steadied it in the center of our system. Of its shape Democritus, like Anaxagoras, took the familiar Milesian view that it is a flat disc or cylinder supported by air. In the liberal atmosphere of Abdera he could also refer with impunity to the mountains on the moon.

Regarding the origin of life on our earth, Democritus was philosophically conventional and orthodox. He referred it to the primeval slime. We have, however, no record of his teaching concerning the method by which life was generated and its myriad forms evolved. There is, however, plenty of evidence that he was keenly interested in biology and physiology, and, in the case of man at least, was much struck by the completeness with which, in his opinion, living bodies were adapted to the performance of their activities.

This enthusiasm for the seeming design in the organs of animate beings, and the seeming purpose in their functions,

coupled with the absence of any explanation of them in mechanical terms, creates an impression of incompleteness and even inconsistency in his system. When, for example, he speaks of the ear as a receptacle for words waiting like an empty pail for the voice to be poured into it,[113] he seems almost to be picturing its Atoms as brought together, not by the laws of motion and blind necessity, but by some mysterious purpose of enabling the organism to hear. The suggestion is heightened by references to his having attributed the construction of the limbs and organs to the secret working of a hidden principle. The apparent failure to reduce to mechanical terms an aspect of the world which otherwise flatly contradicted his theory, has laid Democritus open to the charge of leaving the mechanical hypothesis unfinished and undefended at one of its most vital points.[114] For if the adaptation of organs to their functions and of organisms to their surroundings cannot be accounted for in the same way that all the other arrangements and movements of the Atoms are explained, the laws of mechanics are not universal and the infinite mechanism we have been picturing is not a true likeness of Reality.

Democritus' hesitancy and silence in this important matter are all the more puzzling in view of the lead given him by Empedocles. The latter, it will be remembered, had explained the evolution of the structure of living beings as a purely mechanical process in which the various limbs and organs were blindly thrown and lumped together by the turmoil of Love and Strife, and those combinations which happened to be suited to their environment were preserved and crystallized into the existent species of plants and animals. Had this idea, which so strikingly anticipates the Darwinian theory of the struggle for life and the survival of the fittest, also attracted Democritus' attention, it should have dispelled any perplexities he might have felt about purposive activity. For it would have shown him that the ear, for example, no more existed for the purpose of hearing than the Atoms for the purpose of creating a world. It existed, as Empedocles might

[113] Zeller, *Pre-Socratic Philosophy*, II, 256. Note 2.
[114] Lange, *History of Materialism* (Eng. trans. 1877), I, p. 32.

have said, because a little bunch of Atoms, roughly hollowed out like a pail, collided and became entangled with the other clusters which we call the other organs of the human body. The atomic lump thus formed, luckier than many others which could not survive in the storm, held together and perpetuated itself intact amid the fracas of the evolving world. The ear, happening to be a part of the lump that was not knocked off or kneaded into some other limb or organ, preserved its pail-like shape and became a natural receptacle for such sounds as hit the body. The consequent ability to hear strengthened the position of the body in the atomic storm and contributed to the survival of the organism—particularly of such bodies as had the most capaciously and sensitively formed ears and heard best. The choicer ears perpetuated in this way increased again the durability of the organisms possessing them—and this virtuous circle of reciprocal complement continued indefinitely. Thus it is that the structure of the ear has developed and become suited to its function, and that we happen to hear.

In this Empedoclean manner and as a by-product of the same processes and the same machinery which compress the Atoms into an earth or make the stars go round, Democritus might have explained the entire structure of all living beings and its characteristic adaptation to function and environment. He should have said that design in the make-up of an animal, and the apparent determination of its activities by purpose, are not essentially different from any other quality or change in an object, and are entirely explicable as arrangements of Atoms determined simply by size, shape, weight, and previous movement and collision. But although Democritus seems to have been acquainted with Empedocles' poem he failed to avail himself of its mechanical explanation of the peculiarities of organic life, valuable as it would have been to him in completing his mechanical description of the Universe. Perhaps he had some explanation which has not been transmitted to us. Perhaps he did not realize the problem, or the inconsistency created in his system by allowing design and purpose to flourish unchallenged, and indeed overpraised, in the midst

of an otherwise severely mechanical Reality. Be that as it may, his system is unfinished—as if, for example, he had pulled a cuckoo-clock to pieces for our benefit, explained with great clearness the fundamental laws of gravitation and motion, and the complicated interaction of the weights and cogs which make the hands go round so punctually and invariably, and then passed by the periodic appearance of the cuckoo with a few enthusiastic remarks about the adaptation of its throat to its song, and the cleverness with which it opened the little doors for the purpose of popping out upon the balcony and sounding the hour.

If, however, Democritus leaves the behavior of living beings unreduced to mechanical terms, he gives a strictly atomic account of their animating principle. The soul is a combination of Atoms, although of extra-fine Atoms, perfectly round and smooth and polished, and very mobile. The soul-atoms he identifies in a quite Heracleitan manner with those composing fire. Their ceaseless quivering animates and moves the body. The quivering of enough of them is consciousness and thought. Though the various faculties are associated with different organs, as thinking with the brain, anger with the heart, and desire with the liver, the soul-atoms are diffused throughout the whole body. Their quantity is kept practically constant during life by the continual inbreathing of new particles which replace those that escape from the body. When the balance is upset and there is a slight deficit, we sleep until it is made up. If the deficit is more serious we swoon or pass into a coma. If the loss is total, the Atoms cannot reënter the body, and we die. Once passed out of the body the soul-particles are dispersed, and the soul as an individual atomic cluster or thing ceases to exist. The particular Atoms, however, which combine to form it are eternal and simply fall back into the great reservoir of soul-stuff with which the Universe is soaked like a sponge with water. But apparently it is only when they are lumped and associated with body-atoms that they feel and think as they quiver.

Greek orthodoxy laid little stress on an after life, and Democritus lived in a free-thinking atmosphere. Hence his

denial of immortality got him into no trouble. Nor does the denial of the power and the existence of the Gods, implied in his teachings, seem to have aroused any popular protest. This was due perhaps in part to the modest way in which the implications of his doctrine were veiled from the public gaze. Like all the other philosophers of the time he used religious language in speaking of the World-Stuff, and called it divine, applying the term particularly to the omnipresent soul or fire-atoms. And he explained the popular mythology as a personification of the natural phenomena or the moral ideals commonly associated with the different Gods in the popular imagination. Finally, in his opinion, the idea of the Gods and their appearance in dreams and the like could be satisfactorily explained only by assuming that there actually dwelt afar off in the air man-like beings, who, though made of Atoms and mortal like ourselves, were longer lived and more perfect and more powerful, and could affect us for good or ill. The mailed fist, then, of his mechanical theory was softened and concealed by this sympathetic, interested, and even apologetic way in which he handled established beliefs. Nevertheless, it is perhaps just as well that if he ever visited Athens at all he went incognito.

So far we have been considering an aspect of Democritus' system which looks towards the past, reviews, as it were, the succession of former thinkers back to the far horizon of Thales, and brings their conclusions into an all-including and final perspective. The atomic and mechanical theory as laid down by him and Leucippus gives a decisive answer to the two great questions which originate with the Milesians and have so far dominated the field of philosophic vision. It tells us what the world is made of, and describes the process by which it is formed, in language upon whose essential significance the mechanical theory to-day is unable to improve. From this point of vantage Democritus closes a chapter in the history of philosophy.

But Democritus also figures in the opening pages of a new epoch. There is another side to his philosophy faced towards problems of later origin, which had just become burning issues

and were destined to be of great importance in the immediate future. To this we now turn.

We may remember perhaps that, on the evening when Anaxagoras was pointed out to us in Aspasia's salon, our attention was also drawn to a group of philosophers whom our informant called Sophists and described as teachers of the art of successful speech-making in the Assembly and the Law-Courts. These men were convinced, for reasons which fall outside the scope of the present chapter, that philosophical speculation regarding the nature of Reality was futile, that the logical processes and the views of Truth of different individuals differed beyond hope of securing any universal agreement or authoritative standards, and that for similar reasons it was impossible to discover any absolute right or absolute wrong.

This agnostic denial of the possibility of knowing anything about Reality was all the more subtle an attack upon Democritus as he already half shared the Sophistic skepticism. In terms which recall the Eleatics, Empedocles, and Anaxagoras, he had bewailed the untrustworthiness of the senses and the difficulty of eliciting any true account of Reality from their reports. He had stigmatized sight, hearing, smell, taste, and touch, as "bastard" knowledge. All the wealth and complexity of experience which flowed in through them was, as Parmenides had said, but "names which mortals have given, believing them to be true."[115] Its vain sound and fury signified nothing in the real nature of the external world. Even such fundamental and primary qualities as the size, shape, weight, and movement in space of everyday objects gave us no clue to the forms and sizes, arrangements and motions, of the Atoms themselves.

In a word, the world of experience in which we live and move was in the same difficult and equivocal position in which Parmenides had left it. It was at loose ends. Its existence seemed meaningless and inexplicable. It wavered like Mohammed's coffin between heaven and earth, with no sufficient foothold in the outside Atoms or handhold on the soul Atoms within. And yet it was very difficult to see how we could ever know any other world than this. The senses, untrustworthy as they were,

[115] Fr. 11.

seemed our only points of contact with external Reality. But certainly they never saw, heard, tasted, smelled, or touched Atoms and the Void. How then did we come by the idea that such was the nature of Reality? And having come by it, what reason had we to trust the idea as true?

Democritus' problem was complicated and difficult. He had in the first place to anchor the floating world of everyday experience to the Atoms within and without. He had to explain perception in terms of his mechanical and atomic theory and show why and how the senses falsified Reality as they did. And then he must demonstrate the power of reason to see through the deception, and show, again in terms of his mechanical theory, how a direct contact of the mind with Reality was possible.

In developing his theory of sensation, he followed a hint already thrown out by Empedocles, that all objects are continually shedding their skins, as it were, and giving off particles of themselves. These effluences he defined more precisely as tiny combinations of Atoms which are faithful copies in miniature of the parent body. As they fly through the air they strike upon our sense-organs, through which they penetrate to the soul Atoms. The movements of the mind-stuff are affected by their impact, and sensation occurs. Thus it is that we are able to perceive objects at a distance without violating the mechanical law that all impression and influence must be by direct contact. Moreover, the damage suffered by the images from friction with the Atoms of the air and from collision with other images explains the distortion of size and shape, and the variations of sound, smell, and the like, to which objects perceived at a distance are subject. When the images finally do strike our bodies and enter through the sense-organs best fitted to receive them, their different degree of smoothness and roughness and the various sizes and shapes of their Atoms produce different vibrations in the soul, and give rise to the various colors, sounds, temperatures, tastes, smells, textures, and the like, which we attribute to the external world. As the sense-organs of any two men may differ, or even vary in the same person from moment to moment, similar images may

produce unlike sensations in different people, or in the same individual at different times. Hence the same colorless, tasteless cluster of Atoms may seem red to you, and, if I am color blind, grey-green to me, or, without any corresponding change in its atomic structure, may impress me as sweet at one moment and sour the next.

Democritus had now given an explanation of perception which anticipated all the essentials of our modern theory. He had identified it with movements of the soul Atoms, or, as we might say, of the nervous energy and molecules of brain substance, and had thrown it into gear with the external world by showing that similar movements of the mind-stuff could be produced only by the enmeshing of similar teeth, as it were, in the cogs of the outside mechanism. Hence each one of the so-called "bastard" qualities like a color, sound, or taste, though it might not resemble or recognize its parent, was in reality the legitimate offspring and the inseparable companion of some particular state and configuration of the Atoms without. In the same way, the modern physicist assures us that normally we see red only when between 450 and 475 billion ether waves, in themselves colorless, are striking each second upon the retina of the eye, or hear low *c* only when 128 air waves per second are breaking upon the ear.

But, for all this explanation, the problem of knowledge seemed as far from solution as ever. We now realized only too well that the heaven and earth upon whose changing splendors we looked were not the real outer world but a stained-glass window whose scenes were painted by the senses. We understood the composition of the paints and the craft of the artists. We saw how an external universe by beating upon the jeweled panes could kindle them into all the vain pomp and glory of the world which we perceived. The old doubt, however, still remained. What means had the mind of knowing what that mysterious outer world was like? We were born, lived, and died, immured behind those deceptive and never opened panes. How from the contemplation of even the sublimest of their painted scenes could we get any inkling of the sheer abyss of infinite emptiness and the cyclones of Atoms

storming down the Void, which lay just beyond the impenetrable thinness of the dream-tinted glass?

That we were thus enclosed beyond hope of escape, each one of us in the soap-bubble film of his own illusion, was the gist of the objection which the Sophists over in Athens were urging against philosophy in general, and Democritus had to meet it as best he could. He was as sure as Parmenides that reason was not at all in the same class as the senses, but was privileged somehow to see Reality face to face. The ideas which it formed were not mere "names." The Atoms and the Void were not like colors and tastes, existing, as the Sophists expressed it, by "convention"; they were facts.[116] But he saw that he could not merely assume this. He must defend and prove his belief.

To give a mechanical account of how knowledge takes place, and to show that reason is not wholly cloistered from Reality by the stained-glass window of the senses, Democritus did not find so difficult a task. The senses were not, he said, our only point of contact with the internal world. The whole body was literally alive with the sensitive soul Atoms, and its entire surface was bombarded with images by the external atomic clusters. The soul Atoms were exposed, therefore, not only to an indirect and ricochet fire penetrating through the sense-organs, but to direct hits. The images which missed such tortuous entrances as eye, ear, mouth, and nose, and landed and burst point-blank upon the mind could bring the truth straight home and leave the soul Atoms quaking with the knowledge of things as they really are. Knowledge, then, like sensation, was a movement of the mind-stuff caused mechanically by the immediate impact of external images. But the images which produced it had not already set up through the sense-organs the confusing vibrations of sight and sound and taste and smell. When they struck the reason they were still accurate copies of their great originals, the Atoms moving in the Void, and the responsive quivering of the mind under the blow was not mixed with secondary vibrations from the senses, and was therefore a true idea.

[116] Fr. 125.

Democritus' answer was far too simple to do justice to such a complicated and difficult problem. It failed to sound the real depth of the skepticism of the Sophists, who might have retorted by asking him how he could be sure that the picture of Atoms impressed by Reality upon his mind was truer than the quite different pictures of Numbers, or Fire, or the Eleatic Sphere, imprinted by it with equal logic and clearness upon the minds of the Pythagoreans, Heracleitus, and Parmenides. Again, the differentiation of the conscious from the material side of the Universe had not progressed far enough to permit him to realize the difficulties of regarding sensation and thought as the mere vibrations of material particles. The perception of red, for example, may always accompany a series of movements in the ether, the retina of the eye, the optic nerve, and the occipital lobes of the brain, and may never occur except when these physical processes are taking place. But for all that, redness is not an awareness of any of these things, nor does it suggest them. It is just itself—an immediate and unanalyzable sensation, having a quite different kind of existence from that of the atomic movements with which it is associated. Unconscious as he was of this difficulty, Democritus could not foresee the complications which were to be introduced into the problem of knowledge by the new problem of the relation of the mind to the body and to external objects.

Still, thanks to the stimulating agnosticism of the Sophists, he was the first constructive thinker to realize that we cannot take for granted our faith that there is only one Truth, the same for all men, and our confidence in the power of thought to attain and describe it. He saw that it is part of the business of a philosophic system to weigh the possibility and analyze the process of knowledge. Furthermore, he saw what Parmenides did not see, that even granting the possibility of knowledge, the fact of error still had to be explained. He asked what it meant to have a false opinion, and why and how false opinions could occur. The most incomplete and erroneous views regarding the nature of Reality were, he recognized, themselves part of Reality. And he did his best to picture to himself and to us the complicated atomic process which

explains how we perceive a seemingly real world, know it to be false, and recognize its true nature, all at the same time. From this time on, the problem and theory of knowledge were to play a leading part in the history of philosophy.

At another new point, also, philosophy was stung by the Sophists into action and systematic reflection. The spirit of skepticism was proclaiming the impossibility of knowing not only what is really true but also what is really right and wrong. Moral standards, it would seem, differed as much from person to person and time to time as did beliefs regarding the nature of Reality, and we could no more say that one standard was higher or better, than that one philosophy was truer, than another. In the one case as in the other, it was simply a question of the particular twist to one's brain and individual preference. Just, then, as philosophy had to rally to the defense of our belief in something which exists in itself and is true for all minds, so it had also to prop up our faith that there are some things which are universally right or wrong. Hitherto this faith, so far as it had become an object of reflection, had been expressed in wise saws and maxims founded, like our proverbs, upon practical experience or had been associated and colored with religious beliefs. In Heracleitus alone had anything approaching a theory of ethics appeared, and by him human conduct was regarded as primarily an interesting example of the conflict of opposites and the stress and strain between the Upward and the Downward Ways. But now the skeptical attack of the Sophists upon moral standards made necessary a thoroughgoing study of the behavior of human beings, to see whether after all there might not be discovered certain aims, and certain means and methods of realizing them, which could be regarded as common to all men alike.

So it is that we find Democritus including in his system not only a theory of knowledge but a theory of moral conduct. The fragments which have come down to us do not allow us to follow his ethics in any detail. They are sufficient, however, to reveal to us the general outlines of a way of thinking which later on will become familiar. The aim common to all men

alike is enjoyment. The disagreeable and painful are universally avoided.[117] Similarly all men agree, so far as means and methods are concerned, in considering things useful or harmful according as they conduce to enjoyment or the reverse.[118] But are all enjoyments equally good? No: the pleasures of sense are too shortlived, agitating, and productive of surfeit and pain, to compete with the enduring, calm, unchanging, and painless pleasure of the soul. The enjoyment which all men seek, so far as they know and are guided by their own best interests, is well-being and cheerfulness. But what are the foundations and conditions of a cheerful tranquillity? They do not lie in wealth or other outer circumstances, for fortune though sometimes lavish is a fickle jade. They are to be found rather in preserving an inner attitude of mind, in holding to the golden mean between excess and deficiency, in contemplating noble deeds, and in cultivating the resources of the soul. But in order to distinguish the better pleasures from the worse, discernment and wisdom are necessary. What we lay to hard luck is generally nothing but the result of ignorance.

The Sophists, Democritus might think, were now sufficiently answered. He had shown to his own satisfaction that all men had the same aim and universally judged conduct as good or bad according as it facilitated or impeded the attainment of the common goal. And one man could reasonably find fault with another if he felt and could show that his neighbor failed through ignorance to perceive in what the most enjoyable pleasures consisted, or what were the surest means and methods of enjoying them.

To sum up;—We find that in Leucippus and Democritus all previous reflection upon the nature of the World-Stuff and the formation of the Universe culminates in an atomic and mechanical theory which still has a great influence on modern science. The Eleatic discovery that matter is indestructible and unalterable, both in quantity and quality, is reaffirmed.

[117] Frs. 4, 189.

[118] Frs. 189, 191. *Cf.* Burnet, *Greek Philosophy, Thales to Plato,* pp. 200, 201,

And the work of Empedocles and Anaxagoras, in attempting a reconciliation of this view with the facts of change and motion which had so fascinated Heracleitus, is brought to a satisfactory conclusion. The One of Parmenides is broken up into Atoms which, unlike the four elements of Empedocles and the Anaxagorean particles, preserve the homogeneous transparency, uncolored by qualities, of the Eleatic Reality. These Atoms differ from one another only in size and shape. The differences of quality which Empedocles and Anaxagoras considered fundamental, are now relegated to a secondary position and are regarded as not in the external object at all, but as internal sensations accompanying disturbances in the sense-organs.

Motion is explained, not as a foreign property introduced among otherwise inert and motionless particles by an active outside agent like Love or Strife or Mind, but as naturally inherent in all Atoms because of their weight. The possibility of motion is due to the real existence of empty space or the Void, asserted in the face of Parmenides' identification of a vacuum with nothing (no thing) and his consequent denial that its existence is thinkable.

The Atoms, being heavy, naturally tend to fall perpendicularly through infinite space forever. The heavier naturally fall faster than the lighter and overtake them. The collision, recoil, and resulting whirling motion form everywhere throughout space vortices of Atoms which become entangled with one another and are massed into world systems. By a process, in describing which Democritus mainly reflects contemporary thought, our own system is evolved.

The whole World-Process is conceived as entirely mechanical and governed by efficient causation. Neither chance nor purpose nor Providence can interfere with the simple laws of collision, recoil, and motion, in accordance with which every object is formed and every event occurs.

Man is no less subject to these laws. Democritus, indeed, is enthusiastic over the adaptation of organic structure to environment, and neglects to give a mechanical description of evolution and explanation of apparent design such as Empedo-

cles offers. By this neglect he leaves his theory incomplete at an important point. But nowhere does he admit purpose as a cause.

The human soul like everything else is composed of Atoms, though of a finer and rounder sort. Perception and thought are movements of the soul-atoms. These movements are caused by the impact upon the body of miniature images or copies which every atomic cluster is continually shedding and spreading abroad. The images which strike the sense-organs cause the vibrations of such secondary qualities as color, sound, taste, etc. As these vibrations are within us they do not correspond to characteristics in the external objects, but are conditioned by the nature of our sense-organs. Hence they do not give us a true picture of the constituents of the external world, which, as we have already seen, has only such quantitative properties as size, shape, and weight. True knowledge is, however, possible since the images also strike upon the whole surface of the body which is everywhere alive with soul-atoms. The direct impact of the images upon the soul-atoms sets up vibrations which are not modified by the structure of the senses, and thus can present a picture of the Atoms as they really are.

This theory of knowledge is perhaps an attempt to answer the contemporary skepticism of the Sophists, who denied the existence of any universal truth and the possibility of knowing Reality. Similarly, the Sophistic doctrine that standards of right and wrong are relative and personal may have helped to inspire Democritus' ethics. In his theory of morals he seeks show that enjoyment is an aim common to all men, that intellectual pleasure is universally preferable to sensual, and that the same means of attaining the end—discipline of the will and cultivation of the soul rather than the pursuit of wealth and other external goods—can be prescribed for all alike.

Of the fortunes of the School founded by Democritus we know next to nothing. History has preserved the names of a few disciples and some scattered references to their views. The most prominent members were Metrodorus of Chios and

Anaxarchus of Abdera. The latter was a friend of Alexander's and was famous in antiquity for the philosophic detachment and calm with which he met an unusual and painful death—he was pounded up in a mortar by an enemy into whose hands he had fallen. He was also the teacher of Pyrrho, the founder of an important skeptical revival which followed hard upon the close of the great constructive period of Plato and Aristotle.

This direct apostolic succession from Democritus to Pyrrho is symbolic of the general tendencies of the School of Abdera. The Democritan teachings, or at least such main features as their atomism and mechanicalism, were retained. But at the same time the skeptical admissions of Democritus' theory of sensation seem to have impressed his pupils more deeply than the theory of knowledge with which he sought to correct the defects of perception and combat the Sophists. Apparently both Metrodorus and Anaxarchus, in spite of their profession of the atomic theory, were betrayed into expressions regarding the possibility of knowing the nature of Reality which gained them a reputation for agnosticism among ancient commentators. Eventually the positive side of the Democritan teaching fell by the wayside and the skeptical tendencies of the school helped to inspire Pyrrhonism.

The positive teaching, however, was almost immediately raised and revived by a good—or it may be, a bad—Samaritan in the shape of Epicureanism. Philosophy had been profoundly affected by the political and moral chaos into which the world had been thrown by the sudden conquests of Alexander and the immediate disruption of his empire after his premature death. Its main interest had veered with the squall from the question of the nature of Reality to ethical problems of human happiness and conduct. Metaphysical speculations were simply borrowed ready-made from the past, to stage and sanction particular theories of morals. To the Epicureans human happiness lay in preserving the mind from pain and keeping it saturated with the maximum solution of pleasure. One of the greatest obstacles to this state of mental tranquillity was, they felt, the disturbing fear of an after-life, and of the prying eye and interfering hand of a God, fostered by

religion. A view, then, of Reality which should dispel these terrors and uncertainties was necessary to happiness—and such a view lay ready at hand in the Democritan teaching.

The relaxing, pleasure-laden Epicurean atmosphere through which it was transmitted to posterity gave a baleful glare to the light of the atomic theory. The teaching that the good was to be found in enjoyment, the denial of immortality, the rejection of a moral government of the world, and the disbelief in a divine Providence scandalized antiquity and admitted of no calm discussion of their possible truth. And any system, whatever its intrinsic merits might be, which was invoked disputatiously in support of such doctrines could not but suffer from its association with them. Thus Atomism was discredited not only philosophically by the temporary triumph of Aristotle's doctrine that things are caused by their purposes, but also morally by the disturbing ethical and religious guise in which it was presented by Epicureanism.

## CHAPTER VIII

## SUMMARY

We have now reached, and for that matter, somewhat overstepped, the bounds of the first epoch in the history of ancient philosophy. In dealing with Democritus we have, as we have seen, trespassed upon the times and upon some of the questions which belong to another era. We are, therefore, in a position to bring our discussion to a close by reviewing the main tendencies and achievements of the period with which we have been dealing.

The two principal problems of philosophy—the nature of Reality and the relation of ourselves and the world in which we live to Reality—were, we found, firmly grasped by the early philosophers who constituted the School of Miletus. They felt that the World was one, in spite of its multiplicity and variety, and they asked what this one was like. They guessed that beneath the ceaseless currents of time and change there was something permanent and they asked how this could be. They were driven, then, to search for the Stuff of which all things were really made, and for the process by which that Stuff transformed and diversified itself into all things.

To us, with all the subsequent history of philosophy in mind, it seemed frequently as if the thinkers of the period were interested primarily in the character and processes of physical nature and held a materialistic view of Reality. We reminded ourselves, however, that the antithesis now so sharply drawn between the physical and the mental, the mechanical and the moral, matter and form, data and laws, the concrete and the abstract did not exist for them. The world with which they dealt was, we saw, all of one cloth, shot through and through like a changeable silk with an iridescence of extension, solidity, energy, process, life, feeling, thought, and all the other subtle-

ties that lurk in the fabric of the World. First one, then another aspect might attract and hold the eye as the light of attention shifted. But there was as yet no well-defined suspicion that all this sheen and shimmer might be due to the interweaving of separate, and differently colored and constituted principles in the woof and warp of the World-Stuff. Even at the close of the epoch, when observation had become more detailed and speculation had begun to pick out the various aspects of Reality and hold them apart, the interest that inspired what we should call theories in astronomy or physics or biology or psychology, was not the restrained and specialized spirit of scientific investigation, but an insatiable curiosity to penetrate the mystery completely and reveal every secret of the whole nature of Reality. From the point of view, then, of the philosophers whom we have been discussing, we have dealt in the previous chapters not with speculations about the constitution of matter and the construction of the physical world, but with a true "metaphysical" theory of the "Absolute."

The evolution of fundamental philosophical problems went on with great rapidity. The Milesians had asked two great metaphysical questions. Their answers, which assumed the emergence of a multiple, varied, changing World from a single homogeneous World-Stuff, could not but set a still more profound and difficult problem. They bred inevitably the suspicion that an absolutely simple and single substance, like Water or the Indeterminate or Air, could not possibly turn itself into a multitude of things different both from one another and from the Stuff of which they were composed. If the oneness of Reality meant that it was completely homogeneous and undifferentiated, then it was difficult to see how the moving-picture show of the everyday world, with all its variety of color and incident, could possibly be real. Thus the question of how the Many proceeded from the One, was superseded by a doubt whether in any conceivable way a real, thoroughbred One could give rise to a real Many.

The problem of the One and the Many, of their existence, the sort of reality they possessed, and their relations to one

another, was henceforth to be a dominating problem both of ancient and modern philosophy. And the immediate reactions to it which we have been tracing in the past chapters practically exhaust the types of solution which have been offered by metaphysics.

The first-fruits of this maturing doubt were the widely-divergent systems of Heracleitus and Parmenides. Both men fell heir to the Milesian tradition of a single World-Stuff, and both were equally intent upon preserving the unity of Reality. But here the resemblance ended. Parmenides pushed the Milesian view of a strictly homogeneous World-Stuff to its logical conclusion, and accepted without flinching the consequence that the existence of multiplicity and of change was unthinkable. The crowded, gorgeous pageant of life which parades before our eyes could therefore be nothing but

> ". . . . a moving row
> Of magic, shadow shapes. . . .",

an illusion—a false opinion about the Nature of Things.

Heracleitus, however, was not content to dismiss the world of phenomena in this summary way. He was fascinated by the sparkling, shifting, restless character both of our inner life and the outer Universe, and he sought to redefine the One in a way which should preserve the unity, cohesion, and stability of Reality and at the same time permit variety and transformation to exist within it. For the unity of an invariable and homogeneous Substance, which was really always the same beneath the surface of apparent change and difference, he substituted the unity of an Activity or Process, the very essence of which was a continuous and unbroken transition from one new and different movement, phase, or event to another. Reality from this point of view was not a noun but a verb. Its Oneness and Identity were fed and maintained upon Difference and Multiplicity. If the Many ceased, the One would vanish too.

To this kind of unity and sameness, Heracleitus also added a unity of form. There was always the same order in the sequence of events. The rate, the direction, the volume, the

eddyings of the Flux, were, so to speak, constant, and could be expressed by a Law which held true for all time. The changeless fact and form of change which reason could behold continually exemplified in the torrent of events, he called the Logos.

In the system of Heracleitus we have the prototype of the philosophical theories which exalt the moving, living aspects of Reality and seek to explain in dynamic terms all that is static and fixed. We have already noted its affinity to Leibnitz's view that matter and mind have a least common denominator in Force, of which inanimate substance, life, and consciousness, are only different degrees. It suggests also the Bergsonian doctrine that everything seemingly hard and fast in the Universe, whether it be a hide-bound rule of logical thought, a rigid law of Nature, or a solid body, is nothing but a dead skin, as it were, sloughed off from the unwinding coils of a living, moving, pulsing Activity of Creative Evolution, whose true inwardness is most clearly revealed in the glow and forward flaming of our own inner life. Finally, Heracleitus has been claimed as a kind of premature neo-Hegelian, miraculously privileged to foresee the teaching that Reality, having like an individual an Idea of what it wants to do and be, lives out this Idea in the World-Process, whose unity and self-identity it enriches with an infinite wealth of change and novelty, difference and opposition, in order that it may leave no possible experience untasted, adventure untried, battle unfought, or opponent undefeated, in the working out of its Career.

The Heracleitan Logos also was, as we pointed out, premonitory of scarcely less important developments. It suggested that such things as Types and Laws might have a different kind of existence from that of material objects, and could even exist independently of the particular things which exemplified and obeyed them. This suggestion in Plato's hands became the famous doctrine of Ideas which attributed reality only to the General Forms, Types, Laws and the like, which reason was able to trace in the kaleidoscope of changing phenomena, and reduced the world of sense to fleeting and

distorted images of the Real mirrored confusedly in the flux of unreality. From his time on, the status of Ideas or Forms, the kind of existence they possess, and their relation both to matter and to mind, have been one of the most discussed problems of philosophy.

Parmenides' conclusion that the unity of Reality could not be so conceived as to include and explain variety and change, had no less far-reaching implications than the theory of Heracleitus. When the Eleatics maintained that only the thinkable could exist, and disallowed the evidence of the senses on the ground that it would not stand the test of logic, they pitted reason against the claims both of perception and immediate feeling, and outlined the case of Rationalism against both Empiricism and Mysticism. And yet, their inability to give a logical account of Reality in anything but negative terms almost brought them into the skeptic and the mystic ranks themselves. Finally, the sharp divergence of the Ways of Truth and Opinion led them abruptly to the brink of that Grand Canyon of metaphysics—the cleavage between Appearance and Reality—and, had they not been content to stop at the edge without attempting to explore the place of illusion in Reality and the significance and possibility of error, they would have been precipitated into a philosophic speculation to which no sure bottom has ever been found.

The positions, however, of both Heracleitus and the Eleatics did too much damage to "common sense" to be easily accepted. Heracleitus was perhaps too great as well as too obscure for his time. Philosophy stood heavily upon the solid and substantial aspects of Reality, and could not endure to feel the *terra firma* of the World-Stuff liquefy into Flux and slither away in ceaseless Change beneath its feet. But it could bear as little to be told that the steady and stately movement of solid bodies down the picturesque stream of time and transformation did not really take place but was all false opinion and optical illusion. Both the changing and the permanent, the liquid and the solid, the dynamic and the static aspects of the Universe seemed equally real. The business of philosophy was not to confute common sense but to corroborate it by

working out a theory which should retain the substantial character of Reality and yet leave room within it for movement and variety.

So it was that our last chapter was devoted to describing a development which seemed to aim at a reconciliation of the views of Parmenides and Heracleitus, or, we should perhaps be safer in saying, of the Eleatic teaching with the evidence of experience and the demands of common sense. The direction which this "safe and sane" path was to take, and the conclusions to which it led, had already been posted by the Pythagoreans in their doctrine that different things are simply different Numbers or sums of points or units. Parmenides' idea of Reality as a single rigid, continuous block was discarded, and the One was pulverized into many fragments. But there was no evading the Eleatic demonstration as set forth by Melissus that a really ultimate unit of existence, whatever its nature, must be as permanent and unalterable as the Parmenidean Sphere. Water might conceivably be divided into many drops, but each drop must be water and nothing else. So Reality might perhaps be a Many, but this Many must be only so many miniature Eleatic Ones. This difficulty was met, however, and the liquid character of the world was restored, by the argument that such units, although internally unchangeable, could be combined and arranged in various ways, and that all seeming differences and changes of their nature and quality could be explained as a mere difference and shifting of their number and arrangement.

Heracleitus and Parmenides, the Eleatics and common sense seemed, then, for the moment reconciled. The transient, flowing, active aspect of Reality, with its Process and Becoming and its apparent creation, transformation, and destruction, was not altogether illusion and false opinion. Beneath the surface of the Flux changes of order and number and external relation really took place. But since these changes involved no creation, alteration, or destruction of the World-Elements, Reality was still as uncreated, unalterable, and indestructible, and each of its units as simple and homogeneous, as the Parmenidean Sphere itself. In the systems in which this

method of dealing with Reality was developed we meet the first example both of the pluralistic type of philosophy, and of the materialistic and mechanical interpretation of the universe.

The solution offered by the Atomists, however, was only partial. Change and permanence, to be sure, could now co-exist in Reality without contradiction. But the relation of Appearance to Reality remained a riddle. The everyday world looked no more like Atoms than like Water or the Indeterminate. The flux of phenomena certainly seemed as little a mere monotonous reshuffling and redealing of the same old Many, as it did of the same old One. But why did the Many which we perceive, and the transformations which go on before our eyes, seem so different from the Many which really exist and the changes which really take place? If it was the fault of the senses, why did the senses falsify? And how could reason correct, or for that matter even suspect, the falsification? Questions like these were bound to crowd first upon one another's heels. The curtain went down upon Democritus already at grips with the formidable problems of knowledge and the possibility of error, which still stagger philosophy.

It may be convenient to sum up this development of early Greek philosophy by dividing it into "seven ages." First, there was the feeling that the diversified and disjointed phenomena of Nature were really One, and that all things were made of the same Thing. Second, there was a search for the One Thing of which all things were really made. Third, there was an attempt to explain the method and process by which many different things were made out of One Thing. Fourth, there arose a suspicion that the manufacture of many different things out of One and the same Thing was a self-contradictory and impossible process. This suspicion provoked, fifth, an attempt to conceive a World-Ground so fluid and volatile in nature that its unity, like the unity of a process or of a person's life and career, necessarily presupposed change, motion, novelty, and diversity. But it also provoked, sixth, the opposite conclusion that the unity and permanence of the

World-Ground rendered the multiplicity, variety, and change apparent in the world, non-existent and illusory. Seventh —and lastly—the extreme character of the two preceding views led to an attempt to reconcile the reality of multiplicity and motion with the permanent and substantial character of the Real, by grinding the World-Ground into many units, internally stable but capable of movement in space and of combination in different numbers and arrangements, and by reducing to terms of such movement and combination all the change and diversity of the World-Process.

The growth of the tree of philosophic speculation was, however, not all a spindling trunk. As it pushed upward along the lines we have just outlined, it was also branching out into more specialized interests and lines of investigation. The various aspects of Reality were slowly unfolding, and the limbs of the different sciences were taking shape. For example, the concept of Natural Law as something distinct from the phenomena which obeyed it was already in the subconsciousness of the Milesian School, and became almost explicit in the Heracleitan doctrine of the Logos or World-Order which steered all things and held them to their courses in the Flux. The antithesis of Form and Matter which was to assume such capital importance in the systems of Plato and Aristotle had appeared in the Pythagorean dualism with its opposition of the Limited to the Unlimited, and had been further developed by Heracleitus. The Pythagorean system had also imported from the Orphic Mysteries the no less significant antithesis of Body and Soul. And the doctrine of Number had laid the basis for the Atomism and Pluralism developed at the end of the epoch.

The subdivision of the expanding cell of general philosophic speculation into the fields of the special sciences also went on apace, although the interest which gave life to these new centers of growth remained universal and metaphysical, and never became restricted and one-sided. The first thinkers of the Milesian School had already shown a marked inclination for the study of what we should now call distinctly astronomical and biological phenomena, and these two aspects of Reality

continued to attract and hold the attention of the later philosophers. Anaximander taught a common origin and development of species from more primitive forms of life, and Empedocles later developed an evolutionary hypothesis along lines which anticipate the Darwinian theory. The Pythagoreans were not only bold astronomers, but founders of a great school of medicine, anatomy, and physiology, which numbered Empedocles among its pupils. Nor should we forget the astronomical and the biological speculations of Anaxagoras and Democritus.

To the Pythagoreans we also owe important discoveries in mathematics, and it was but recently that we were dwelling upon the profound and difficult questions raised by the Eleatic Zeno, which involved the theory of limits, and the nature of infinity and the continuum.

The nuclei of psychology and ethics could already be detected in the fragments of Heracleitus. In the systems of Empedocles, Anaxagoras, and Democritus, with their theories of sensation, and their speculations regarding the nature and seat of consciousness the special psychological field became fairly well marked. Democritus, again, devoted sufficient attention to the problem of human conduct and of the nature of the Good to develop ethics, if not into a separate science, at least into a distinct branch of philosophic investigation.

The Heracleitan doctrine of the Logos set reason and its operations over against the senses. Parmenides' insistence upon reason as the sole test of truth and existence, and the development of formal reasoning by his followers, brought logic into being. Furthermore, his discrediting of all the reports of the senses regarding the nature of Reality raised a number of difficulties which led in Democritus to a separate treatment of the problem of knowledge—in other words, to an epistemology.

Finally, towards the end of the epoch we found philosophy dealing mainly with aspects of Reality and with questions which we should now regard as the fundamental concepts and problems of physics. Matter was distinguished from space, and attempts were made to define the nature and relations of

the two newly disentangled principles. Motion also emerged as a distinct concept, and its origin and relation to matter were discussed. In the course of this discussion a mechanical view of causation and process was unconsciously developed by Empedocles and Anaxagoras and explicitly set forth by Democritus.

We may then take leave of our epoch, feeling that a cycle in the spiral of philosophical progress if, indeed, it be a spiral, has been completed. The great aspects of Reality upon which the different branches of philosophy and the special sciences are founded have been roughly distinguished. The fundamental problems of philosophy have been detected and the typical solutions proposed. Is Reality One or Many? Is it static or dynamic, a substance or a process? Can it be so conceived as to permit the real existence of the varied, changing world? Or does it logically reduce that world to illusion? And where is there room or explanation in Reality for illusion and mere appearance? Can Reality be perceived by the senses or even known by reason? How can reason detect and correct the falsity of the senses? Is the World-Process governed by purpose or by blind mechanical necessity? What is the nature of matter and space and motion? What kind of existence have laws and types and forms, and what is their relation to the particular phenomena and events which obey and exemplify them? What is the nature of consciousness? How is it related to matter? How is the human mind related to the human body? In what and how shall man find his happiness, and what is the real significance in Reality of the distinction which human beings make between good and evil?

Questions like these go far towards exhausting the repertoire of philosophic inquisitiveness, and before the end of our period they were all of them pressing with more or less insistence for an answer. Henceforth, reflection and speculation were to revolve in a circle whose circumference had been nearly closed. The horizons of the world were to expand and the means of observing and mapping the surface of Reality were to become more detailed and more precise as time went on.

Philosophy was to rise to points of wider outlook and flights of bolder fancy. Yet we may question at the end as we did at the beginning of our discussion, whether the thinkers of to-day possess any greater ability to give a philosophic interpretation of the world than did Thales.

So far, however, as ancient philosophy is concerned, the early Greek thinkers were really forerunners in the wilderness, preparing the way of the Lord. In the next cycle, the problems which they had set and the solutions which they had offered were to be reviewed by the genius of Plato and Aristotle. Philosophy was about to keep its head at an altitude which it has never again attained, and to look steadily and discerningly into depths, of which all subsequent vision, it might be argued, has been more dizzy than profound. But the heights of this impending survey of all time and existence lie beyond the scope of the present volume.

# APPENDIX

# I. CHRONOLOGICAL TABLE[1]

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| 3000—1100 B. C. | Era of Cretan-Ægean culture and civilization. Rise and fall of the great Minoan Empire, which, from its capital at Cnossus in Crete, dominated the islands and shores of the southern Ægean and implanted the so-called "Mycenæan" culture—testified to by the treasure and ruins of "golden" Mycenæ and Tiryns—in Greece itself. |
| Circ. 1500. | Height of the splendor and power of the Minoan Empire. |
| 1500—1300. | Mycenæan civilization on the Greek mainland at its zenith. |
| Circ. 1400. | The Minoan Empire overtaken by a sudden and mysterious catastrophe—possibly a Mycenæan invasion from the Greek mainland. The great palace at Cnossus burnt. Collapse of the Cretan domination. |
| 1100—950. | The Great Migrations. "Dorian" tribes, displaced by an invasion of the Thessalians from northern Epirus, pressed southwards, occupying Bœotia and Corinth, threatening Athens, and even overrunning Crete. The original inhabitants, representative of Minoan-Mycenæan civilization, either were reduced to an inferior condition or migrated to the coast of Asia Minor. Here they were followed by an afterwash of the Dorian inundation. The mixture of the two peoples produced the Ionians, who developed a brilliant Hellenic civilization in Asia Minor and built up many rich and powerful cities, among which Miletus, Ephesus, Colo- |

[1] The historical portion of the table is based for the most part on *Chronos, a Handbook of Comparative Chronology,* by R. J. Hart, 1912.

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| | phon, and Clazomenæ were later of particular philosophic interest. |
| Circ. 940—850. | Homer. The Iliad and the Odyssey. |
| Circ. 850—800. | Hesiod. Works and Days. The Theogony. |
| Circ. 820. | Sparta politically stabilized by the legislation of Lycurgus. |
| Circ. 776. | The first celebration of the Pan-Hellenic Games at Olympia, the date of which was exactly determined. All subsequent Greek history was reckoned in terms, known as Olympiads, of the successive celebrations of these games, which took place every four years. |
| Circ. 750—730. | Beginning of the colonization of Southern Italy and Sicily, or "Magna Græcia," by the Greeks. Foundation of Croton, Tarentum, Rhegium, Syracuse, Leontini, etc. |
| 743—723. | Era of political disorder in most of the Greek town of Messenia, resulting in the collapse of Messenia, and the aggrandizement of Sparta. |
| 700—600. | Era of political disorder in most of the Greek states. Rise of tyrants and oligarchies. Growth and prosperity of the Ionian cities in Asia Minor. Sparta the leading city in Greece. Archaic period in art. Age of the elegiac and iambic poets, Callinus, Tyrtæus, Alcman, Simonides, of Amorgas, Mimnermus, Stesichorus (Sicily), Sappho, Alcæus. Era of growing self-consciousness and self-examination, and mental and moral unrest. |
| 660—610. | Growth of the Lydian Kingdom in Asia Minor. Continuous attacks upon the Ionian cities. Some of them were subjugated by the Lydians, but Miletus, Ephesus, and Clazomenæ, among others, held out, and Miletus entered into an alliance with the Lydians in which her independence was recognized. |
| 645. | Second war between Sparta and Messenia, resulting in the Spartan conquest of the Southern Peloponnesus. |

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| 625. | Periander tyrant of Corinth. Height of Corinthian power and splendor. |
| Circ. 610. | *The philosopher Anaximander born at Miletus.* |
| Circ. 600. | *Thales, the first Greek philosopher, at his prime at Miletus.* |
| 600—500. | *The Milesian School of Philosophy, Thales, Anaximander, and Anaximenes.* Also era of the "Seven Sages," of whom Thales was accounted one. Period of great intellectual ferment, and moral and religious reform and revival. Progress in art and architecture. The "culture-mad" tyrants and their brilliant courts. An epoch akin to the Renaissance and the Elizabethan Age. |
| 594. | The constitutional reforms of Solon at Athens. |
| Circ. 570—565. | *The philosopher Xenophanes born at Colophon in Asia Minor.* |
| 568—546. | Height of the Lydian power in Asia Minor under Crœsus. Miletus, Ephesus, and other Ionian cities were subdued by him and acknowledged his overlordship. |
| 560—511. | Tyranny, at Athens, of Peisistratus and his sons Hippias and Hipparchus (the Peisistratidæ). Art, literature, and religion patronized by Peisistratus. The Panathenæa, a festival in honor of Athene, founded. The festivals of Dionysus and the Eleusinian Mysteries favored and made more important. The Orphic Mysteries introduced into Athens by Onomacritus and "taken up" by the tyrant. Beginnings of tragic poetry. Athens improved and beautified. An era of considerable brilliance at Athens. |
| 546. | Conquest of Lydia by the Persian King, Cyrus. Fall of Crœsus. The Ionian cities, with the exception of Miletus, who transferred her alliance and allegiance from Lydia to Persia, made an armed resistance, but were quickly subdued. *Fugitives from the captured towns of Teos and Phocæa founded respectively Abdera in Thrace,* |

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| | *the native town of the philosophers Democritus and Protagoras, and Elea in southern Italy, the birthplace of the philosophers Parmenides and Zeno (and possibly also of Leucippus), from which the Eleatic School took its name.* |
| Circ. 532. | *The philosopher Pythagoras emigrated from Samos to Croton in southern Italy, where he founded the Pythagorean brotherhood.* |
| 525. | The poet Æschylus born at Eleusis in Attica. |
| Circ. 522. | The poet Pindar born at Thebes (or Cynoscephalæ, in Theban territory). |
| 521. | The poet Anacreon at his prime. |
| 511. | Revolt, at Athens, of Cleisthenes, and fall of the Peisistratidæ. End of the tyranny at Athens. The code of Solon reformed, and the democratic constitution of Cleisthenes drawn up and put in force. |
| Circ. 510. | *Growing dissatisfaction in southern Italy with the theocratic rule of the Pythagorean Brotherhood. Flight of Pythagoras from Croton to Metapontum in southern Italy.* |
| Circ. 500. | *Death of Pythagoras at Metapontum.* |
| 499—494. | The revolt of the Ionian cities against Persia. The Ionians, assisted by Athens, were at first successful, and captured and burned Sardis, the old Lydian capital. But the tide soon turned, and the Greeks were badly defeated near Ephesus. The Athenians then abandoned the enterprise, and returned home, having incurred the wrath of the Persian King, Darius, and sown the seeds of the Persian attack on Greece. The revolt, however, spread, and was not stamped out by the Persians for nearly six years. |
| Circ. 497 | *The philosopher Anaxagoras born at Clazomenæ in Asia Minor.* |
| 495. | The poet Sophocles born at Colonus near Athens. |

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| 494. | Fall of Miletus and final extinction of the Ionian revolt by the Persians. *End of the Milesian School. The philosopher, Anaximenes, possibly still alive.* |
| 493. | First Persian Expedition against Athens in revenge for the Athenian participation in the Ionian revolt and the sack of Sardis. Abortive, however, because of the destruction by a storm of the Persian fleet. |
| 490. | Second Persian Expedition. The Persians advanced as far as Marathon, where they were signally defeated. |
| Circ. 490. | *The philosopher Empedocles born at Acragas (Agrigentum) in Sicily.* |
| Circ. 490? | *The philosopher Leucippus born at Miletus? or Elea?* |
| Circ. 490. | *The philosopher Heracleitus in his prime at Ephesus in Asia Minor.* |
| Circ. 490. | *The Philosopher Zeno, a pupil of Parmenides, born at Elea in southern Italy.* |
| 490—480. | Growth of the power of Athens. Banishment of the statesman, Aristides. Athenian policy in the hands of Themistocles. Building of the fleet. A congress held to decide on steps for coping with a new, threatened Persian invasion. |
| Circ. 483. | *The philosopher Gorgias born at Leontini in Sicily.* |
| Circ. 481?[1] | *The philosopher Protagoras born at Abdera in Thrace.* |
| 481. | The historian Herodotus born at Halicarnassus in Asia Minor. |
| 480. | The poet Euripides born at Salamis. |
| Circ. 480—475 | *The philosopher Parmenides at his prime in Elea in southern Italy.* |

1 The birth of Protagoras, however, is placed as early as 500 B. C. by Professor Burnet. *Cf. Greek Philosophy,* pp. 111-112.

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| 480. | Third Persian invasion of Greece, under Xerxes. The battle of Thermopylæ. Advance of the Persians to Athens. Defeat of the Persian fleet by the Athenians at Salamis, and subsequent retreat of the Persian armies. |
| 480. | Defeat by Syracuse and Acragas at the battle of Himera of a Carthaginian attack on Sicily. |
| 478. | Athens now the most powerful state in Greece. Defensive alliance against Persia of the islands of the Ægean under the hegemony of Athens, known as the Confederacy of Delos. |
| Circ. 478. | *The philosopher Xenophanes still alive in Sicily at the court of the tyrant Hiero of Syracuse.* |
| 471. | The historian Thucydides born at Athens. |
| 471—469. | *The philosopher Socrates born at Athens.* |
| Circ. 470. | *The philosopher Melissus born at Samos.* Struggle for power between the rival statesmen |
| 468—461. | Cimon and Pericles at Athens, ending in the banishment of Cimon and the ascendency of Pericles. |
| 462. | *The philosopher Anaxagoras called to Athens by Pericles.* |
| 461—431. | Transformation by Pericles of the Confederacy of Delos into the Athenian Empire. Extension of the Empire. Growth of commerce and wealth. Athens at the zenith of her power and brilliancy. The Periclean Age and Circle. A "Golden Age" of art and literature, adorned by the poets Sophocles and Euripides; the historians Herodotus and Thucydides; the philosophers Anaxagoras, Protagoras, and the youthful Socrates; the painters Polygnotus and Parnænus; the sculptors Myron, Phidias, Pæonius, and Polyclitus; and Mnesicles and Ictinus, the architects of the Parthenon and the Propylæa. The "long walls" connecting Athens with the Peiræus built. |
| Circ. 460. | *The philosopher Democritus, the pupil of Leucippus, born at Abdera in Thrace.* |

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| 456. | The poet Æschylus died at Gela in Sicily. |
| Circ. 454. | Removal of the treasury of the Delian League from Delos to Athens. This an important step in converting the League into an Empire. |
| Circ. 450. | *Final uprising in the southern Italian cities against the Pythagorean Theocracy. The lodges of the Brotherhood were burnt, the members massacred, and the survivors fled for their lives, many of them to Thebes and elsewhere in Greece.* |
| Circ. 449? | *Visit of the philosophers Parmenides and Zeno to Athens. Interview with the youthful Socrates.* |
| Circ. 448. | The poet Aristophanes born at Athens. |
| Circ. 444. | *The philosopher Empedocles, in his prime, visited Thurii, where he probably met Protagoras and Herodotus.* |
| 443. | The historian Thucydides, a political opponent of Pericles, banished, leaving Pericles supreme. The subject-allies of the Confederacy now frankly taxed for Athenian purposes. |
| 440. | *Incidental to an unsuccessful attempt of the island of Samos to secede from the Athenian Empire, the Athenian naval forces were defeated by the Samian fleet commanded by Admiral the philosopher Melissus of the Eleatic School.* |
| 432. | *The philosopher Anaxagoras tried at Athens for materialistic views regarding the nature of the sun and the moon. Thrown into prison, he escaped and fled to Lampsacus on the Hellespont, where he died soon afterwards, highly respected and honored by his new, more liberal fellow-townsmen.* |
| 431. | Outbreak of the long-drawn-out Peloponnesian War, between Athens and Sparta. The popularity of Pericles already on the wane. |

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| Circ. 430. | *The philosopher Empedocles died; place unknown, but probably not in Sicily.* |
| 429. | The Plague in Athens. Death of Pericles. |
| 427. | *The philosopher Plato born at Athens.* |
| 427. | *Advent at Athens of the philosopher Gorgias, at the head of an embassy from Leontini and her allies to ask for help against Syracuse.* |
| 421—416. | Truce between Athens and Sparta. Political ascendency of Alcibiades, the pupil and friend of Socrates. |
| 415. | Launching by Athens of the great "Sicilian Expedition" against Syracuse; the war with Sparta also having been renewed. |
| 413. | Terrible and decisive defeat of the Athenians at Syracuse. Revolt of Chios, Lesbos, and Miletus against Athenian domination. Beginning of the break-up of the Athenian Empire and of the decline of Athenian power. |
| Circ. 411?[1] | *Protagoras tried for impiety and exiled from Athens. Shipwrecked and drowned en route for Sicily.* |
| 409—404. | Great Carthaginian expedition against Sicily. Initial success. Himera, Selinus, and Acragas destroyed. The democratic constitution of Syracuse abandoned and Dionysius made tyrant. Carthaginian advance against Syracuse. |
| 406. | The poet Euripides died in Macedonia. |
| 405. | The Athenian fleet beaten and destroyed by the Spartans under Lysander at Ægospotami. |
| 404. | End of the Peloponnesian War. Surrender of Athens. Razing of the Long Walls and destruction of the fortifications. Athens reduced to a subject-ally of Sparta. Sparta now the dominant power in Greece. |

[1] The story of Protagoras' trial and exile is rejected by Professor Burnet, who places the date of his death in the early years of the Peloponnesian War. *Cf. Greek Philosophy,* pp. 111-112.

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| **404.** | Conclusion of peace between Carthage and Syracuse, by which the Carthaginians retained considerable territory and influence in Sicily. |
| **404.** | The poet Sophocles died at Athens. |
| **404—403.** | Establishment of an oligarchy at Athens. The Thirty Tyrants. Reign of Terror. |
| **403.** | Overthrow of the oligarchy and reëstablishment of the democracy at Athens. |
| **399.** | *Trial and execution at Athens of Socrates on charges of impiety and corruption of the youth by his teachings.* |

# II. BIBLIOGRAPHY

## I. BIBLIOGRAPHY OF GREEK RELIGION


E. Abel. *Fragmenta Orphica.* 1885.

J. Adam. *The Religious Teachers of Greece.* 2nd. ed. 1909.

L. Campbell. *Religion in Greek Literature.* 1898.

F. M. Cornford. *From Religion to Philosophy.* 1912.

A. Fairbanks. *Handbook of Greek Religion.* 1910.

L. R. Farnell. *The Cults of the Greek States.* 5 vols. 1896-1907.
*Greek Hero Cults and Ideas of Immortality.* 1921.
*The Higher Aspects of Greek Religion.* 1912.
*Outline History of Greek Religion.* 2nd. ed. 1921.

P. Foucart. *Les Mystères d'Eleusis.* 1914.

J. Girard. *Le Sentiment Religieux en Grèce d'Homère à Eschyle.* 3rd. ed. 1887.

O. Gruppe. *Griechische Mythologie und Religionsgeschichte.* 2 vols. 1906.

J. Harrison. *Prolegomena to the Study of Greek Religion.* 2nd. ed. 1908.

C. A. Lobeck. *Aglaophamus sive de Theologiæ Mysticæ Græcorum causis.* 1829.

F. Legge. *Forerunners and Rivals of Christianity.* 1915. Vol. I., Ch. IV.

V. Macchioro. *Zagreus, Studi sull' Orfismo.* 1920.

C. H. Moore. *Religious Thought of the Greeks.* 1916.

G. Murray. *Four Stages of Greek Religion.* 1912.

C. F. Nagelsbach. *Homerische Theologie.* 3rd. ed. 1884.
*Nachhomerische Theologie.* 1857.

E. Rohde. *Psyche; Seelencult und Unsterblichkeitsglaube der Griechen.* 2nd. ed. 1898.

E. Tournier. *Némésis et la Jalousie des Dieux.* 1863.

## II. PHILOSOPHICAL BIBLIOGRAPHY

Thoroughgoing and critical studies of the period dealt with in this volume will be found in the histories of Ancient Philosophy by Gomperz and Zeller.

Th. Gomperz. *Griechische Denker.* 3 vols. 1903-09. English translation *Greek Thinkers.* 4 vols. 1901-12. Vol. I.

E. Zeller. *Die Philosophie der Griechen.* 6 vols. (Editions of the different volumes from 1869 to 1909.) English translation of Pre-Socratic portion: *Pre-Socratic Philosophy.* 2 vols. 1881.

Interesting discussions may also be found in:

A. W. Benn. *The Greek Philosophers.* 2 vols. 2nd. ed. 1914. Vol. I.

*The Philosophy of Greece.* 1898. Pp. 1-109.

J. Burnet. *Greek Philosophy I. Thales—Plato.* 1914.

For briefer treatment the histories by Cushman, Rogers, de Ruggiero, Thilly, Ueberweg, Weber, and Windelband may be consulted. (The last three named have been translated into English.)

The most modern, learned, and stimulating book which confines itself to the period is

J. Burnet. *Early Greek Philosophy.* 3rd. ed. 1920.

A brief résumé is given in

A. W. Benn. *Early Greek Philosophy.*

The fragments of the works of the early philosophers have been collected in

H. Diels. *Fragmenta der Vorsokratiker.* 3rd. ed. 1912.

Translations into English of the fragments have been made in

C. M. Bakewell. *Source Book in Ancient Philosophy.* 1907.

J. Burnet. *Early Greek Philosophy.* 3rd. ed. 1920.

A. Fairbanks. *The First Philosophers of Greece.* 1898.

Individual studies of some of the thinkers of the period may be found in such works as

L. Liard. *De Democrito Philosopho.* 1873.

G. T. W. Patrick. *The Fragments of the Work of Heracleitus of Ephesus on Nature.* 1889.

H. Ritter. *Geschichte der Pythagorischen Philosophie.* 1826.

E. Sonlier. *Eraclito Efesio.* 1885.

and in the large number of monographs (mainly in French and German) dealing with the different philosophers.

Mention should also be made of

C. Baeumker. *Das Problem der Materie in der Griechischen Philosophie.* 1890.

A. Rivaud. *Le Problème du Devenir et la Notion de la Matière dans la Philosophie Grecque.* 1906.

P. Tannery. *Pour l'histoire de la Science Hellène.* 1887.

# INDEX


Abdera, 144, 211, 228; School of, 253
Absolute, 2, 11, 256
Achilles, 165
Acragas, 182
Acropolis, 209, 210
Activity, 189
Adam, 32; "old Adam," 40, 61
Ægean Sea, 76
Æschylus, 35, 82, 101, 132, 206
Agnosticism, 101, 178, 253
Agrigentum, 182
Air, as World-Stuff, 91, 188, 227
Alalia, 144
Alcæus, 80
Alcmæon, 186
Alexander, 253
Alexandria, 198, 199
All, the, 54
Anaxagoras, 71, 141, 161, 173, 201, 212; anecdotes, 201; influence of Empedocles, 214; life, 202; Mind and, 218; opinions, 214; summary of philosophy, 224; World-Stuff, 215, 220
Anaxarchus of Abdera, 253
Anaximander, 86; on the origin of man, 89; on the origin of the world, 87; Pythagoreans and, 106
Anaximines, 69, 70, 90; Pythagoreans and, 106
Antitheses in Heracleitus, 119
Apollo, 103; worship of, 105
Appearance and Reality, 138, 157, 259
Apple, Newton and, 10
Archelaus, 225
Archilochus, 80
Architecture, 79, 210
Aristagoras, 90
Aristocracy, 204
Aristotle, 265; on Democritus, 238; on Empedocles, 195; on God, 36, 43; on Love and Strife, 190
Aristotle, on the origin of philosophy, 19
Arrow in the air, 165
Artists, 80
Asceticism, 65
Asia Minor, 76, 140, 206
Aspasia, 207, 209; salon, 209
Astronomy, 81, 91; Anaximander and Anaximenes, 94; Pythagoreans, 113, 117
Athens, 48, 169; Orphism, 58; Periclean age, 202
Athenians, 203, 205, 208
Atlantis, 76
Atomic Theory, 228, 238
Atomicity, 227
Atomists, 261
Atoms, 173, 177, 231; Anaximenes and, 93; definition, 233; movement of, 233
Attraction and repulsion, 190
Automatic world, 237

Bacon, Francis, 4
Bacon, Roger, 213
Beans, 185
Beauty, 203
Becoming, 129; Being and, 121
Being, 150; Becoming and, 121; material or immaterial, 174
Bergson, Henri, 258
Bias of Priene, 143, 144
Birth and rebirth, 64
Blood, circulation of, 195
Body, human, 198
Boundless, the, 87, 91
Brains, 212, 218
Braluna, 157

Buddhism, 23, 26
Byron, Lord, 54

Callicrates, 210
Carthage, 182
Catalyzers, 190, 219
Change, 120; changelessness and, 120; Identity through, 121; meaning, 125; reality, 124; Reality and, 149
Chaos, 194
Character, 14; relation of philosophy to, 15; strength of, 16
Cheerfulness, 250
Chemists, 8
Cheshire Cat, 171
Chios, 143
Christianity, 25
Civilization, 53
Clazomanæ, 141, 201, 212
Caloplion, 98
Common sense, 259
Companionship, 22; inner, 25
Complexities, 53
Condensation and rarefaction, 91, 95, 226
Consciousness, 9, 10, 53, 137, 195, 196, 218, 242
Constitution of the World, 130
Contemplation, 105
Contradictions, 167, 163
Corinth, 79, 80, 206
Corsica, 144
Counter-earth, 114
Creation, 34, 35, 90; Empedocles on, 192
Crete, 76
Crœsus, 77, 79, 84
Croton, 104
Curiosity, 2, 3, 13
Curvature, 151, 152
Cyprus, 141

Damon, 210
Dancing, 57, 58
Dante, 238
Darkness and Light, 146
Darwinian Theory. *See* Evolution.
Debatable ground, 10, 11
Delos, 168, 169, 202
Demeter, 47
Democracy, 78, 118, 204
Democritus, 144, 206, 227, 261; atoms, 234; censured by Aristotle, 238; ethics, 249; life, 228; manner of death, 229; philosophy, 234; reputation, 230; summary of his philosophy, 250; unfinished system, 242; writings, 229
Descartes, 156, 187, 198
Despotisms, 79
Destiny, 34, 130
Determination, 102
Devil, 40
Dialectic, 159, 162, 170, 176; method of, 163
Diogenes, 180
Diogenes Laertius, 134
Diogenes of Apollonia, 226
Diogysus, 56, 154; advent, 59; cult, 57; worship, 65
Dionysus Zagreus, 59
Discipline, Orphic, 65
Diseases, 198
Dissenting sects, 65, 66
Dithyramb, 80
Divine nature, Aristotle's idea, 36; Greek view, 33; human nature and, 31
Doctors, 198
Dodecapolis, 76
Dog and man, 31
Downward Way, 127
Dreamers, 15
Drunkenness, 57
Dualism, Christian, 40; Pythagorean, 110, 114

Ear and sound, 240, 241
Earth, Anaxagoras on, 220, 221; Democritus on, 239; Xenophanes on, 100
Earth, Water, Air, and Fire, 188, 215
Earth-goddess, 47
Efficiency, 14
Effluences, 196, 245
Egyptian priesthood, 19
Einstein Theory 95, 151, 171, 227
Elea, 142, 144

Eleatic School, 122, 143, 260; summary of doctrine as a whole, 174; value of their contribution to philosophy, 176
Elements, four, 188, 215
Eleusinian Mysteries, 24, 28, 41; central idea, 47; cult, 48; liturgy, 48, 50; object and benefits, 49; ritual, 48; teaching, 51
Eleusis, 47
Empiricism, 139, 157
Empedocles, 161, 180; Anaxagoras and, 214; double life, 181; exile, 183; four elements, 188, 214; Heracleitus and, 187; origin of the world and of life, 192, 193; philosophy, 186; religion, 183; scientific interests, 186; summary of his philosophy, 199
Emptiness, 170, 172
Energy, 189
Enjoyment, 250
Envy of the Gods, 32
Ephesus, 118
Epicureanism, 253
Epicureans, 43; idea of God, 44
Epicurus, 141
Equilibrium, 127, 129, 131
Error, 158, 248, 261
Eternal life, 500. *See also* Immortality
Ether, 156, 160, 232
Ethics, 36, 134, 249
Etna, 181
Euripides, 67, 206, 210
Eurytus, 109
Evil, 39, 52; Heracleitus on, 132; Orphic story of, 60; redemption from, 45
Evolution, 193, 195, 213; Anaxagoras and, 221; creative, 258; Greek anticipation, 89
Evolutionary theories, 172
Existence, 148, 161
Experiences, 9, 244

Fall of man, 46
Familiarity, 32
Fate, 34
Fatherhood of God, 31
Fellow-travelers, 2, 7, 20
Fire, 123, 135, 188, 193, 194
Flux, 124, 138, 258, 260
Force, 138, 189, 258
Form and matter, 115, 117, 139, 259
Four elements, 188, 215
Fourth Gospel, 133
Freedom, 19
Freedom of thought, 71
Future life. *See* Immortality

Galileo, 213
Geography, 81
Geometry, 84
God, 25; Empedocles on, 183, 184; Fatherhood of, 31; goodness of, 42; Heracleitus on, 119, 126; monotheism of Xenophanes, 99
Gods, 24; character and experiences, 31; Democritus on, 243; envy, 32; Greek attitude toward, 27, 30; humanity of the Greek Gods, 29; Olympian, 24, 42, 44, 70; powers, 34, 35
Golden Age, 185, 191
Golden mean, 108
Good and evil, 39, 60; Pythagoreans and, 111
Goodness of God, 42
Gorgias, 211
Gravitation, 10, 30
Greek religion, 19; contrast to Christianity, 26; counter-currents, 42; summary of its character, 71
Gyges, 76

Hades, 41, 47
Hamilcar, 182
Happiness, 250, 254
Heaven, 43, 51
Hecatæus, 87
Heracleitus, 98, 118, 257; astronomical views, 134; chief principle, 122; on human conduct, 134; Parmenides and, 153; summary of his system, 141
Heresy, 65
Hermes, 63, 103
Hermodorus, 118, 210
Herodotus, 206, 210

Hesiod, 24, 46, 59, 119; theology, 81, 99, 100
Hexameter, 80
Hiero, 98
High Church movement, 67
Himæra, 182
Hippo, 227
Hippocrates, 198
Homer, 24; after-life, 41; Fate, 34; sin, 39; theology, 81, 99, 100, 119, 183, 184
Homing instinct of the soul, 54
Homœomera, 216
Human nature, 31; divine nature and, 31
Huxley, Thomas, 4
Hylozoists, 96

Ictinus, 210
Idæus of Himera, 227
Ideas, Platonic, 258
Identity and Change, 121, 125
Illusions, 149
Immortality, 40, 46; Democritus' denial, 243; Eleusinian Mysteries and, 49
Impressions, 20
Indeterminate, 87, 93, 108, 215
Individuality, 52; rebellion against its limitations, 52, 53
Indivisible instants, 166
Infinitesimal, 163
Infinity, 33, 168; Pythagorean, 111; of Reality, 170
Inner life, 25, 26
Instants, indivisible, 166
Instinctive feelings, 20
Intolerance, 205
Intoxication, 57
Intuitions, 20
Ion, 210
Ionia, 76, 98, 140, 143, 206, 208
Ions and electrons, 232
Italy, philosophy in, 143

James, William, 198
Japanese, 203, 205
Jehoval, 32
Justice, 37, 110, 131, 132, 146

Kant, Immanuel, 147; on space, 165
Karma, 46
Kentucky, 214
Key-Bearer, 146
Kipling, Rudyard, 32
Knowledge, 4, 158; bastard, 244; Democritus on, 247; problem of, 161, 249, 261

Lampeacus, 202, 213, 225
Laurel, 185
Law, 130, 140, 237, 258. *See also* moral law; natural law
Leibnitz, 138, 258
Leisure, 19
Leonardo da Vinci, 130
Leontini, 211
Lesbos, 80
Lethe, 62, 64
Leucippus, 141, 227; philosophy, 231; World-Stuff, 232
Life, 2, 123; Democritus on, 239; enlargement, 13; whole philosophy of, 4
Life-forces, 190
Light and Darkness, 146
Limbo, 238
Limited and Unlimited, 106
Living, making a, 14, 15
Loadstone, 86
Locke, John, 198
Logic, 159, 160
Logicians, 8
Logos, 130, 132, 135, 138, 258
Love, 146; Strife and, 189, 240
Lucretius, 15
Lydia, 76, 79, 84

Maeterlinck, Maurice, 31
Magna Græcia, 98, 104, 206
Man, 60, 89; origin according to Anaximander, 89; Orphic story of origin, 60
Many and One, 121, 163, 173, 187, 256
Maps, 87
Marriage, 110
Materialists, 180
Mathematics and the Pythagoreans 108, 113, 117

Matter, 97; Form and, 115, 117, 139; indestructibility, 149
Mean, notion of, 107, 113
Mechanical view of the world, 237, 243
Mechanists, 180
Medicine, 107; Empedocles, 181; philosophy and, 198; Pythagoreans and, 107, 113, 117
Melissus, 140, 151, 168, 228, 260; philosophy, 170, 176
Metaphysics, 11
Metapontum, 104
Metrodorus of Chios, 252
Middle term, 108
Milesian School, 76, 121, 226, 255; criticisms, 96; Pythagoreans and, 106; two great questions, 95
Miletus, 76, 169; circumstances, 77; downfall, 90; first philosophers, 76; Sixth Century B. C. in, 76, 78
Mind, 212, 213; Anaxagoras and, 218
Minos, 76
Miracle play, 49
Mirror, 59, 60
Mnesicles, 210
Moderation, 16, 33
Moira, 34
Molecules, 173, 217
Monists, 96
Monotheism, 99, 183
Moon, 221
Moral law, 26, 38, 131; natural law and, 29
Moral standards, 249
Motion, 88; Anaxagoras on, 218; Atoms and, 233; Empedocles and, 189; paradoxical character, 165, 167; rest and, 119; Zeno on, 162
Motor-cars passing each other, 166
Multiplicity, 168, 187, 257
Music, Pythagoreans and, 107, 113, 117
Music of the spheres, 113
Mycale, 168
Mysteries, Heracleitus on, 118
Mysticism, 23; of the man in the street, 53; Parmenides and, 177; Pythagoreans and, 104
Myth, 25
Mythology, 24

Natural law, 26, 131, 262; moral law and, 29
Nature, 4; getting back to, 53; Greek feeling toward, 27; human character of, 29; mechanical view, 28; relation to humanity, 26; uniformity, 238
Necessity, 34, 146, 237
Neo-Pythagorean movement, 113
Nerves, 53
Newton, Sir Isaac, 10
Nirvana, 23, 157, 185
Nothing, 148, 155, 170
Numbers, 108; odd and even, 111; Pythagorean doctrine, 108

Ocean, 85
Odd and even numbers, 111
Olympia, 183, 209
Olympian Gods, 24, 42; belief in, 70; perfection, 44
Olympus, 45
Omnipotence, 33, 35
Omniscience, 33, 36
Omophagia, 58, 64
One and Many, 121, 163, 173, 187, 256
One Thing, 261
Opinion, Way of, 146, 147, 154
Opposites, 88, 135; conflict of, 110; Heracleitus on, 124, 126, 127; Pythagoreans and, 106
Order, 130, 140
Original sin, 55
Orphism, 24, 28, 41, 47; central idea, 56; discipline, 65; influence on philosophy, 69; origin, 58; Pythagoreans and, 104; ritual, 64; sensationalism, 67, 68; teachings, 59
Orthodoxy, 66, 69, 70

Pain, 223, 253
Pan, 59
Paradise, 52. *See also* Heaven; Immortality
Parmenides, 122, 144, 257; disciples, 161; doctrine of Reality, 149;

Heracleitus and, 153; mechanism of sound thinking, 159; mystical quality, 154; philosophy, 145, 147, 175; poem, 146
Parthenon, 209
Passion play, 49, 50
Pasteur, Louis, 181
Perception, 196; Anaxagoras and, 222; Democritus' anticipation of modern theory, 246; theory of Empedocles, 196
Perfection of God, 42; of the Olympian Gods, 44
Pericles, 169, 202, 203, 207
Persephone, 47
Persia, 84, 90
Persians, 143, 168, 182, 204
Permanence and change, 120, 126, 129
Personality, 25, 26
Persons and things, 27, 86, 190
Phanes, 59, 193
Pheidias, 209
Phenomena, 178
Philosophers, 5; disagreements, 6; need of carefulness in research, 6; too many, 14
Philosophic system, 5, 10, 17, 101
Philosophy, 1; association with religion, 20; birthplace, 78; definition, 1, 5, 13, 17; early problems, 94; first use of term, 105; fundamental problems, 264; history of definition, 17; method and tests, 7; need of leisure for, 19; popular sense of the word, 16; relation to religion, 23; relation to Greek religion, 70; relation to science, 12, 17; religious atmosphere favorable to, 71; scope, 7; summing up of early stage, 261; theology and, 71; two principal problems, 255; use and value, 12
Phocæa, 143
Physical law. *See* Natural law
Physicians, 198
Physicists, 8, 96
Physics, 96, 232
Physiology, 195
Pindar, 32, 185, 204
Piræus, 210
Plants, 193
Plato, 163, 265; approach through system of Heracleitus, 133; ideas, 258; influence of Pythagoras on, 105, 113
Pleasure, 250, 253
Plurality of world, 222, 226, 236
Pluralists, 180
Plutarch, 190
Poetry, 80
Point-events, 227, 232
Political and social science, 214
Polycrates, 104
Prayer, 31
Prejudices, 20
Priene, 143, 144, 169
Principles, 16
Properties, 216
Protagoras, 101, 211
Protobion, 193
Psychologists, 7
Psychology, 195; Heracleitus, 136
Punishment, 38; future, 41
Purification, 48, 184
Purpose, 219, 238
Pyrrho, 253
Pythagoras, 102, 103, 119; exaltation, 103; life, 104; personality, 103
Pythagoreanism, 103; as philosophy and as religion, 113; Eleatics and, 161; Parmenides and, 146
Pythagoreans, 102, 103; doctrine of Numbers, 108; good and evil, 111; Limited and Unlimited, 107; philosophy, 106; religious order, 104; science, 106

Qualities, 216

Rarefaction and condensation, 91, 95, 226
Rationalism, 157
Reality, 2, 5, 129; Appearance and, 138, 157, 259; dualistic conception, 115, 117; infinity of, 170; nature of, 94; nature of and our relation to, 255; Parmenides on, 149

Reason, 130, 148, 224; senses and, 136, 153
Redemption, 26, 45, 55; Orphic mysteries, 56, 64
Reincarnation, 46, 63, 184
Religion, 19; association with philosophy, 20; definition, 22; general considerations, 20; Greek, 19; Greek, counter-currents, 42; Greek, summary, 71; inward-turning, 25; original springs, 21; relation to philosophy, 23
Renaissance, 82, 83, 203, 208, 239
Rest and motion, 119
Resurrection, 51
Revolution, 78
Rhegium, 144
Right and wrong, 249
Rite, 25

Sacrifice, 57, 64, 185
St. Paul, 40, 61
Salamis, 168, 182, 210
Salvation, 25, 50, 54; mystics, 55
Samos, 104, 141, 168, 169
Sappho, 80
Sardinia, 143
Sardis, 79, 80, 90
Science, 12; Greek, 81; modern, 227, 232, 238; relation to philosophy, 12, 17
Scientific method, 17
Scientists, 7, 8
Sculpture, 80
Self, 25, 26
Selinus, 181
Semele, 59
Sensation, 9, 222; Democritus' theory, 245
Senses, 196, 197, 223; reason and, 136, 153
Sensibility, 15
Sex, 191, 194
Sextus Empiricus, 198, 199
Sicily, 98, 182
Sin, 38; as mental error, 39; orphic doctrine, 62
Sixth Century B. C., 76, 78
Skepticism, 101, 177; moral standards, 249; Sophists, 244, 248
Social science, 214
Society, Universe as a, 30
Socrates, 39, 71, 145, 162, 211
Solon, 80, 81
Sophists, 177, 211, 244; objection to philosophy, 247; skepticism as to moral standards, 249
Sophocles, 82, 169, 206, 210
Soul, 26; Democritus on, 242; Empedocles on, 191; Heracleitus on, 136; homing instinct, 54; orphic doctrine, 62
Space, 9, 151, 170; infinity of, 164, 165; World-Stuff and empty space, 233
Spencer, Herbert, 147
Sphere, 164, 187, 231, 260; Empedocles and, 188; reality as, 150, 151; Zeno on, 164
Spinoza, 155
Stesichorus, 81
Stoicism, 133
Stoics, 43, 141
Straight lines, 151, 152
Strife, 128, 132; Love and, 189, 240
Substance, 85, 216
Sun, 131, 134, 193, 212, 213
Supernatural, 25, 26
Superstitions, 21
Sympathy, 22, 25
Syracuse, 182

Taste, 203
Temperance, 131
Teos, 144, 228
Thales, 69, 70, 83
Thermistocles, 204
Theognis, 78, 80, 82
Theology, 21; ancient philosophy and, 71
Theron, 182, 185
Things, 27; persons and, 27, 86, 190; properties and, 216
Thinking, sound, 159
Thrasydæus, 182
Thucydides, 204, 211
Thurii, 183, 210
Time, 9, 124, 125, 149, 170
Titans, 59

Tolerance, 16
Tortoise, Achilles and, 165
Transmigration of Souls, 63, 101, 104
Trespass, 37
Trustworthiness of Nature, 238
Truth, Way of, 147, 154, 158
Types, 258
Tyrants, 78

Uniformity of Nature, 238
Unity of the world, 84; in Heracleitus, 257; in Parmenides, 145
Universe, 2; as a society, 30; companionableness, 22; curiosity about, 2; elusiveness of its inner character, 3; man's relation to, 4; personal relationship with, 21; real nature, 5, 17; unity of, 84. *See also* World-Stuff
Unlimited, 106, 116
Upward Way, 127

Vacuum, 156, 161, 187, 232
Vapor, as World-stuff, 91
Variety, 150, 157, 161, 172
Velia, 144
Vice, 39, 40
Virtue, 37; as knowledge, 39; essence, 37
Visions, 15
Vital-fluids, 190
Voltaire, 98
Vortices, 232

War, 128
Water, 85, 153, 188, 227; Anaximander and, 87
Way of Opinion, 146, 147, 154
Way of Truth, 147, 154, 158
Well-being, 250
Whirling, 220, 226, 237, 239
Wisdom, 105, 130, 132
Women in Athens, 209
Wonder, 2
Word, 133, 134. *See also* Logos
World. *See* Universe
World-egg, 193
World-ground, 261
World-Process, 262; Democritus on, 235
World-Stuff, 85, 255; Anaxagoras on, 215, 220; Anaximander on, 87; Anaximenes on, 91; Empedocles on, 184; empty space and, 232; Leucippus on, 232; Melissus and, 171, 174; Parmenides on, 160, 176; Thales on, 85; Xenophanes on, 99

Xenophanes, 70, 98, 114, 119; critical work, 100; influence on Parmenides, 145; monotheism, 99
Xerxes, 182

Zeno, 141, 144, 151, 159, 161, 211; Melissus and, 170; method of reasoning, 162; philosophy, 162, 176; story about, 162
Zeus, 31, 35, 45; dear city of, 133; origin, 59; statue, 209; Theognis on, 82

THE END

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# HISTORY OF GREEK PHILOSOPHY

# HISTORY OF GREEK PHILOSOPHY

## ARISTOTLE

BY

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To

ELEANOR WOOD WHITEHEAD

A PHILOSOPHER AND FRIEND

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# CONTENTS


| CHAPTER | | PAGE |
|---|---|---|
| | Preface | ix |
| I. | The Life of Aristotle | 1 |
| II. | Development of Aristotle's Metaphysical Theory | 31 |
| III. | Form and Matter. The Actual and the Potential | 52 |
| IV. | The Aristotelian Physics | 73 |
| V. | The Search for the Unmoved Mover | 85 |
| VI. | The Approach to the Unmoved Mover | 118 |
| VII. | The Discovery of the Unmoved Mover | 141 |
| VIII. | The Aristotelian Logic | 162 |
| IX. | The Aristotelian Ethics | 196 |
| X. | Aristotle's Political Theory | 265 |
| XI. | Aristotle's Rhetoric and Poetics | 294 |
| XII. | Review | 331 |
| | Chronological Table | 355 |
| | Bibliography | 363 |
| | Index | 365 |

# PREFACE

This book was originally planned and written to form, with my recently published work on the Sophists, Socrates, and Plato, a single volume. The result proved too bulky, and the "Aristotle" had to be thrown off from the original mass and given independent existence, much as the moon by an excess of centrifugal force was catapulted from the earth. Consequently it bears scars of its lunar and dependent origin, which cannot be altogether hidden. But it will also bear independent witness, I hope, to the faith, already expressed in my previous books, that philosophy is exciting and its history romantic. That faith I have tried once more to express in works. If the present volume succeeds in making converts to it, or even in disturbing the vulgar superstition that philosophy is intrinsically a dull subject, I shall be content.

Here, as in my former books, I must disclaim any original ideas or research. I have profited by the labors of others, and repeated their criticisms and suggestions; but not, I trust, without sufficient acknowledgment of my indebtedness. At the same time, I should not wish it to be supposed that the more vulgar illustrations I have employed, and the flippancies of which I shall be accused, are other than my own.

I must express my thanks once more to the friends who helped me in one way or another with those chapters of the larger work that make up the book at hand. I am under particular obligation to my colleagues, Professors L. T. More, G. A. Tawney, R. K. Hack, and R. P. Casey of the University of Cincinnati; to Professors R. B. Perry and R. M. Eaton of Harvard University; to Mrs. J. J. Whitehead, Jr.; and to Mr. Howard Sagmaster who typed the manuscript.

B. A. G. F.

Graduate School
University of Cincinnati
*April, 1931*

# HISTORY OF GREEK PHILOSOPHY

## CHAPTER I

## THE LIFE OF ARISTOTLE

### I

Caught up and swept along though it is in the thunderous charge of Alexander the Great across the field of history, the life of Aristotle is quieter and more sedentary, both outwardly and inwardly, than that of Plato. Lived more apart from the times, and less agitated by a devotion to "causes," political, moral, and religious, it is briefer not only in years—Aristotle died at the age of sixty-three—but also in incident, not to speak of physical and spiritual adventure. It lacks the romance, the conflict, the agitation by hope and fear, the sense of exile and pilgrimage, that make Plato's career so stirring. The same perhaps is true of the Aristotelian system. In spite of its greater bulk and its more encyclopaedic range, we shall find it more compassable and more compact than the Platonic philosophy. Also, it may seem in comparison less exalted and less splendid. But at the same time we shall perhaps feel ourselves in touch with a more patient, cautious, and impartial mind.

Aristotle's education, like that of Plato, began long before his birth, and the circumstances that contributed to his making doubtless did much to color more soberly the glass through which he viewed the world. Plato, Athenian and aristocrat that he was, instinctively looked at the universe from beneath raised eyebrows, and saw it from the top down. Even in his most scientific and detached moments he was never quite free

from moral and aesthetic fastidiousness. His breeding made him naturally supercilious towards the pretensions of any "hoi polloi," be it the masses or the "Many." The world of particular things, he instinctively felt, was born metaphysically vulgar and to a subordinate place in Reality. His first impulse towards it was not scientific but religious and political. The Many, like the masses, were not to be studied coolly on their own merits. They were there first of all to exemplify the benefits of formation and government from on high.

Aristotle, however, emerged from a provincial, comparatively middle-class background. The practice of medicine in a small, remote city, not government and the maintenance of high position in a great capital, was the long established habit of his family. Moreover, not only was his heritage pre-eminently scientific and matter of fact, but he himself was a scientist and "realist" by disposition, without ethical or artistic squeamishness and with a head not easily turned by his heart. Where the poet, religious mystic, and enthusiast in Plato showed evidences of philosophic nausea, Aristotle probed, analyzed, and weighed. His interest lay in sizing up the world as it was, not in concentrating upon things as they would be if only they were completely amenable to reason and the Good. He was at ease with the "common people" of the universe, the Many, the particular objects. Everything, then, conspired to make him see his world and build his system from the bottom up, and to attach a greater, if not a supreme metaphysical importance to individual things—the tangible facts of ordinary observation and experiment, with which instinctively he was chiefly concerned.

Aristotle was born in 384 B. C. His native town, Stagira, lay in the newer, rougher world of Thrace, but in a portion of it, the Chalcidic peninsula, that had long been colonized by Greeks. Its Hellenism, indeed, was if anything accentuated by its frontier situation on the border of the despised "barbarian" world, where its flourishing cities, banded together in a powerful league, were still struggling to keep their liberties intact and their ideals unspotted in the face of the influence and rising power of Macedon. But it was only through constant

effort, backed and supported from the south, that they did so, and the tenseness and sharp contrasts of light and shade in the atmosphere in which his first years were spent may have had something to do with the disdain for all non-Greek ways and institutions so marked in Aristotle's political philosophy.[1]

Most of the Chalcidic towns, as the name of the peninsula shows, looked to Chalcis in Euboea as their mother city, but Stagira had been founded by emigrants from the island of Andros, and the Chalcidic element was a later influx. Aristotle united in himself the two strains. His mother was of Euboean descent, and indeed, it would seem, still owned inherited property in Chalcis. His father, Nicomachus, was a prominent physician, sprung from a long line of doctors, and traced his descent, as most doctors did, to Asclepius, the patron saint of medicine, son of Apollo. So Aristotle, like Plato, could claim kinship with the Gods.

Nicomachus must have been a man of considerable eminence, for he was offered by Amyntas II of Macedon, Alexander the Great's grandfather, the post of court physician, and he is spoken of not only as the king's doctor but as his friend. The acceptance of the offer made it necessary for the family to move to Pella, the Macedonian capital, and here it was that a part, at least, of Aristotle's boyhood was spent. Of the next few years we know almost nothing. Pella itself had little to recommend it. Its greatness had been but recently thrust upon it, and what there was of it was largely a mushroom growth. If the court had been still established at Edessa, the older seat of the Macedonian kings, there would at least have been some compensation in the scenery. But the new capital was set in the midst of unhealthful swamps, on the shores of a fresh-water lake.

Life, too, was quite different from that of a Greek town. Macedon was the "wild west" of the Hellenic world. Its royal line might be of good Doric blood, but the land itself was considered by many quite beyond the pale of Hellenism and civilization. The people were country bred and country loving, not dwellers in cities, and they cared little for those amenities

1 *Cf.* Taylor, *Aristotle,* p. 11.

of urban existence so dear to the true Greek. There had, to be sure, been a short era of forced, imported culture under Amyntas' predecessor, Archelaus, but it had disappeared leaving no trace behind. The nobility had reverted to their estates, where they lived a true Homeric life, hunting, feasting, drinking, and roistering. To these sports they added at the moment that of "shooting up" one another in baronial feuds and petty civil wars. Indeed, the general anarchy was so great that conditions have been likened to those in England in the twelfth, and France in the fifteenth century.[2] To put it in modern terms, Aristotle's case was not unlike that of some European boy of good family and tradition brought by his father's diplomatic career to early-nineteenth-century Washington, with a strong dash of a rough American mining town thrown in, there to pass his early years. And the doctor Nicomachus, and still more his wife, had, we may imagine, many a homesick moment when they longed for the law and order, the comforts, the sightliness, and the civilization of old Stagira, not to speak of its pleasant shores and fresh sea-breezes.

Aristotle's first sojourn in Macedon, however, was short. Both his parents died while he was in his early 'teens or even sooner, and we next come upon him as an orphan committed to the care of a relative at home, named Proxenus. Whether Nicomachus had lived long enough to instruct him in anatomy and medicine—doctoring being in those days a family business handed down from father to son—we do not know. Nor have we any further light upon his education and his personality until he is eighteen. Then he suddenly appears again, following the fashion of so many young men from his part of the world and coming up to Athens to study at the Academy. Plato, however, was away at the time on his second trip to Sicily, trying to turn the younger Dionysius into a philosopher-king, so that for a couple of years Aristotle had to be content with assistant professors like Xenocrates and Speusippus. Or it may be that he spent the time studying with Plato's foremost academic rival, the brilliant orator, political essayist, and pro-Macedonian expounder of pan-Hellenism, Isocrates.

[2] Curteis, *Rise of the Macedonian Empire*, p. 14.

The probably exaggerated and malicious description of him as a student at the Academy is amusing—that he was ultra-smart and a good deal of a fop, lisped affectedly, and in Plato's eyes paid far more attention to the details of toilette and dress than was becoming in a professed devotee of the philosophic life. There may be a basis of truth in these stories, for when we come to Aristotle's account in his *Ethics* of how a truly superior and distinguished man should behave—and there can be little doubt that he considered himself such—we find mention of a grave demeanor, a slow and stately gait, a deeply modulated voice, and in general, an appearance thoroughly well valeted morally as well as sartorially.[3] However that may be, he was ultra-smart in another sense of the word, and was destined to tower intellectually as high above his companions and lesser instructors in the Academy as Plato above the fellow-disciples of Socrates. He showed, too, his distinct bent for philosophy more quickly than did Plato, and apparently was soon to the fore in the School discussions.

There are stories, indeed, of early and somewhat acrimonious disputes with the master himself, and even of out and out rudeness. But these are probably mere ill-natured gossip. The weight of evidence is that his personal attitude was always one of great respect and affection.[4] Whether, however, his admiration for Plato was at any time extended to the latter's teachings is a more disputed point. The orthodox view is that he was always inclined to criticism and disagreement, and some scholars have maintained that he never properly understood the Platonic doctrine[5] at all, and often took what was told him by subordinates like Speusippus and Xenocrates for gospel truth.[6] On the other hand we have the view that he was for a long time in substantial agreement with Plato.[7] We have the fragments of two dialogues written while he was still at the Academy—the *Eudemus*, a treatise on immortality dedicated

[3] *Eth. Nic.*, IV, 8.

[4] On this point *cf.* Zeller, *Aristotle*, I, pp. 9 ff.

[5] This is the thesis of Robin's *Théorie Platonicienne des Idées et des Nombres d'après Aristote.*

[6] *Cf.* Robin, *op. cit.*, pp. 450 ff.

[7] This is a thesis of Jaeger's *Aristoteles.*

to the memory of a bosom-friend who fell fighting in Dion's expedition against Syracuse, and the *Protrepticus*, an address to Themistion, Prince of Cyprus, elucidating for his benefit the principles of philosophy and exhorting him to put them into practice in his rule; and these, it is argued, are thoroughly Platonic in tone.[8] Far, too, from accepting the interpretations of fellow-students and lesser instructors as good Platonism, his first criticisms, we are told, were not directed against Plato but principally against what he considered misrepresentations on the part of the Academy, and particularly of Speusippus.[9] And even when he had struck out for himself, the argument continues, he believed, for a while at least, that he was going in a direction indicated by his master and that he was following through rather than departing from the latter's real doctrine.[10] We had best defer to these differences of opinion, but we are on reasonably sure ground in supposing that a young man of Aristotle's calibre must very early have had a mind of his own, whatever that mind was, and that he took little on faith and accepted so much of the Academy teaching as he did, critically and after due consideration, carefully weighing the *pros* and the *cons*.

When Plato died in 347 B. C., Aristotle was thirty-seven and had been associated with the Academy some nineteen years. By this time he was a very "old boy," fully conscious without doubt of his ability as a philosopher. It irked him, of course, to have the presidency of the Academy fall to a second-rate man like Speusippus, although this was only to be expected seeing that the latter was Plato's nephew and the legal heir to the property and plant. It probably irked him all the more if he thought that the nephew misunderstood and perverted the uncle's teaching. Also, Macedon and people with Macedonian affiliations were not popular at the moment in Attica, and it may be that he found life there uncomfortable. Various reasons, then, conspired to make him wish to leave Athens. And yet he had nowhere to go. Stagira, to which he would naturally have returned, was a heap of ruins, sacked and burned

[8] Jaeger, *op. cit.*, pp. 34 ff., 51–52, 100 ff.
[9] Jaeger, *op. cit.*, pp. 182 ff., 196 ff.
[10] Jaeger, *op. cit.*, p. 179.

along with the other towns of the Chalcidic League upon whom the Macedonian peril, so long imminent, had burst at last when Philip, son of Amyntas, began to sweep aside the nearer obstacles to dominion of the world.

In these circumstances an invitation from a former schoolmate, Hermeias, now lord of Assos and Atarneus in the Troad, came opportunely. Incidentally it included Xenocrates, who also was glad to avail himself of it, since apparently his nose, too, was out of joint at the turn things had taken in the Academy. Moreover, the visit not only afforded relief from a trying situation; in itself it promised much that was interesting. Hermeias was in some respects an expurgated and pleasant version of Dionysius I of Syracuse. Like his Sicilian "cousin" he was a self-made man of lowly origin who had come to the fore through a mixture of energy, intelligence, and determination, which was not always scrupulous in its methods. He had worked in a bank at the change counter, when a young man, just as Dionysius had worked in a government office as a clerk. He made money and invested it in the purchase of some small towns not far from Mt. Ida (somewhat to the east of modern Adalia). Here he established himself as overlord, and eventually, for a handsome consideration, got himself recognized by the Persian government as a "Prince." But he had become really interested in philosophy at the Academy,[11] and at the time of his invitation to Aristotle was much under the influence of two old Academicians, Erastus and Coriscus, from the neighboring town of Scepsis, who had been trying out Platonic theories in the legislation of their native city. In fact, he found their political advice so good that he had handed over to them his own town of Assos; and well he might, for he owed the success and extension of his little principality almost as much to the enlightened rule prescribed by them as to the force of his arms.

Aristotle and Xenocrates found these old fellow-pupils at Hermeias' side waiting to welcome them, very much as Plato had found Aristippus and Aeschines in Syracuse. But their pleasure at the reunion was, we may suppose, more genuine. In

11 *Cf.*, however, Jaeger, *op. cit., loc. cit.*

any case they settled down quite happily at Assos, and here Aristotle spent the next three or four years. His nephew Callisthenes, later to come to a tragic end under charge of conspiring against Alexander, joined him, and he seems to have gathered about him the little group of disciples which was to expand into his Lyceum. To this period belong the dialogue *On Philosophy,* probably the earlier parts of the *Metaphysics*[12] and the *Politics,*[13] and, if we grant its genuineness, the *Eudemian Ethics.*[14] Some of his work on physics and allied subjects, indeed, he may have brought with him from Athens.[15]

While at Assos, Aristotle married a niece and adopted daughter of Hermeias. He was not the kind of man, we may imagine, to be averse to alliance with a princely house, however recent. But he seems also to have loved the lady for herself, though the story that he devoted his honeymoon to collecting sea-shells would seem to betray a certain absent-mindedness. By her he had one daughter, named Pythias after her mother. Soon after his marriage he left Assos for Mytilene, on the island of Lesbos, a city famous two centuries before, in the age of the culture-mad tyrants, as the seat of the brilliant court of the Penthelids and the home of the poetess Sappho, and still, in spite of rough handling by Athens, from whose empire it had been among the first to revolt at the outset of the Peloponnesian War, one of the richest and most powerful towns in Asia Minor. Why Aristotle went there we do not know, except that it was the home of his friend and pupil Theophrastus, to whom eventually he was to leave the presidency of his Lyceum. Moreover, it proved an excellent centre for biological research,[16] in which he had always been deeply interested.

Meanwhile, a new and important episode in his life was pending. Apparently though out of sight of the Macedonian court these many years, he was not entirely out of mind. It may be that through his father's former position he was in some sort of touch. It may be that Philip, with whom he had very likely played as a small child, remembered him pleasantly,

12 *Cf.* Ross, *Aristotle,* p. 8.
13 *Cf.* Jaeger, *op. cit.,* p. 302.
14 *Cf.* Jaeger, *op. cit.,* p. 268, note 1.
15 *Cf.* Jaeger, *op. cit.,* pp. 311 ff.
16 *Cf.* Ross, *op. cit.,* pp. 3–4.

and being a patron of art and science, and in a position to get the latest news from Athens, had noted his boyhood friend's brilliant career at the Academy.[17] Or perhaps international politics was in part responsible. Philip was intensely ambitious socially. He wanted to get Macedon into the exclusive assemblage of the blue-blooded Greek states, and have her go about with the best people, a recognized Hellene among Hellenes. To climb and arrive the more quickly, he conceived the idea of stirring up and putting himself at the head of a great campaign against an undoubted outsider like Persia, and then posing as the champion and protector of Hellenism against the "barbarians." And a secret arrangement already existed between him and the Prince Hermeias to use Assos and Atarneus as an Asiatic bridgehead for the Macedonian armies in case of war. An unofficial ambassador was needed between the two rulers, and Aristotle, an old playmate of the one and the trusted friend of the other, may well have been *persona grata* to both.[18] Be all that as it may, Philip was looking for a new tutor for his thirteen-year-old boy, Alexander, with whose education he was at the moment by no means satisfied, and offered the job to Aristotle, who accepted it.

The city to which Aristotle returned was quite different from the Pella of his childhood. In the interval it had grown into a respectable capital. Philip had improved and fortified it, and had permanently established there both his Treasury and his War Department. The streets must have bristled with smart officers and troops, for it not only housed the High Command but was the central barracks and training camp of the largest and most efficient army in the known world. Doubtless, too, it reflected the law and order that prevailed throughout the country since Philip had brought the insubordinate nobles to heel, and was not without evidence of the king's pretensions to Hellenic culture and of his eagerness to prove that Macedon was quite civilized and Greek. Incidentally, we may remark in passing that Philip's pure Hellenism fell short when he opened his mouth, and still shorter when it came to his matrimonial relations. He had an

17 *Cf.* Zeller, *op. cit.*, I, p. 21, note b. 18 *Cf.* Jaeger, *op. cit.*, p. 120.

Oriental leaning to a plurality of wives, and could never get his particles quite right when he spoke—the final test of a Greek to the manor born. Still, these little deviations did not prevent Pella from being a fine, upstanding new place. All in all, if in the old days it had been a ragged and muddy infant Washington, it was now quite a spick and span Berlin, and Aristotle must have felt somewhat as an old resident of Cleveland or Detroit might feel on returning to his native town today after a quarter of a century's absence.

His relations with the king seem always to have been cordial, and he soon had the affection and confidence of his pupil. He persuaded Philip to rebuild Stagira,[19] and had frequent occasion to intercede with him, and later with Alexander, on behalf of Greek cities and individuals. He also made new and trusted friends, among them Antipater, destined to be European viceroy during Alexander's campaigns in Asia, and after the latter's death to be king of Macedon and Greece. But he also lost his old friend, Hermeias, in tragic circumstances. The Persians got wind of the agreement with Philip, invaded the principality, besieged Atarneus, and took the prince by treachery. He was sent up to Susa, the Persian capital, where an attempt was made to extort from him the terms of the secret treaty. On his refusal to reveal them, he was crucified. His last words were, "Tell my friends and companions I have done nothing unbecoming or unworthy of philosophy." Aristotle wrote the epitaph for a monument erected to his memory at Delphi, and dedicated a hymn to him.

This incident, doubtless, increased Aristotle's contempt for the "barbarians." But it also fanned the Greeks' dislike and suspicion of Macedon, certifying as it did to Philip's imperialistic designs. Relations were strained enough as things were. For the past ten years the great Athenian orator and statesman, Demosthenes, had been carrying on a violent anti-Macedonian campaign, haranguing his fellow-countrymen upon the growing peril in the north, and taking them to task for their unwillingness to abandon the lazy, luxurious, pacifistic ways

[19] *Cf.* Zeller, *op. cit.*, I, p. 24, note 1. Jaeger, however, *op. cit.*, p. 124, thinks Stagira was rebuilt by Alexander.

into which they had fallen, and to make the disagreeable military effort necessary to meet the situation. And slowly but surely all his prophecies were coming true, as the encroaching tide crept down upon them. In 348, to be sure, Philip's attack upon the Chalcidic League had roused Athens to a half-hearted war, which was soon patched up because the Athenians were indolent and glad to escape with whole skins and Philip for the moment had his eye on other game. What that game was, was soon clear. Within two years he had wedged his way through Thermopylae and entered Delphi. There was nothing to do now but receive him into the pan-Hellenic religious assembly, the Amphictyonic council, and placate him still further by asking him to be a president of the Pythian games—invitations hitherto sent to none but *bona fide* Greeks. He had got Macedon into Hellenic society at last, for all his many wives, his misplaced particles, and the gibes of Demosthenes. The latter, however, never remitted his efforts or swerved from his policy of calling upon the Greek states to unite and withstand the northern barbarians. And he carried his anti-Macedonianism so far as to propose that the ancient enemy, the "barbarian" Persians, should be induced to join the coalition.

Now that the Hermeias affair had exposed Philip's nefarious designs upon them as well as upon Hellas, Demosthenes looked to them for prompt action and the fulfilment of his hopes. But he looked in vain. After disposing of Hermeias, Persia made no further move. Nor could Greece be stirred into independent action. Philip came on relentlessly. He seized and annexed Thessaly, and, taking advantage of the perennial hates and quarrels of the Greek states among themselves, backed the lesser Peloponnesian cities against Sparta and thus secured a foothold in the southern peninsula. Athens was as good as encircled, and her back was to the wall.

Meanwhile Aristotle was in Pella or thereabouts tutoring his charge. To scratch a Macedonian was to find a "barbarian," and the more un-Greek elements in his high-strung and high-handed pupil—Alexander's capricious and passionate temperament, and his strain of brutality and cruelty—he could not change or more than partly discipline. But he

tried to overlay and control them, so far as he could, with Hellenic ideals of self-control and moderation and reasonableness, teaching him history and statescraft, imbuing him with scientific curiosity and a love of knowledge, and seeking to build up within him a reflective and detached vision of himself and of the world. And Alexander's passions and ambitions he endeavored to sublimate in hero-worship and aspiration towards the excellence of many-sided self-realization. The task was all the easier, as the boy's mother, Olympias, born a princess of Epirus, claimed descent from Achilles, and was forever reminding her son that the blood of Homeric kings flowed in his veins, and holding up before him the example and inspiration of his great ancestor. In this she was seconded by Alexander's earlier tutors, so that he came under Aristotle's influence already impressed with an "Achilles-complex." He knew the Iliad by heart, and in later years carried a copy with him in all his campaigns. And after he had become king, and was marching upon Asia, he saw himself as a second Achilles and his campaign as another Trojan War.

The extent, however, to which Aristotle succeeded in really influencing Alexander is a disputed point. The young king seems in the beginning to have regarded the hero's sword as an instrument not merely for conquest, but also for the dissemination of Hellenic culture among the barbarians, and in this ideal of himself as the bearer of Western civilization to "inferior" races it is maintained that Aristotle's hand can be clearly seen.[20] But it has also been argued that the philosopher's influence was never very great.[21] Certainly it was not enduring, for Alexander was soon to rise to the higher and wider vision of a fusing of Greek and Oriental civilization that should transcend the distinction, so vital to Aristotle, between barbarian and Hellene—a vision prophetic of the cosmopolitanism of the Hellenistic and Roman worlds, and remotely foreshadowing the Stoic and Christian doctrine of the brotherhood of man. And as time went on, we shall soon see, the personal relations between the old pupil and his former teacher became uncomfortably strained.

20 *Cf.* Jaeger, *op. cit.*, pp. 121 ff.

21 Taylor, *op. cit.*, p. 8.

There is a similar difference of opinion with regard to the reverse influence exercised upon Aristotle by the growth of the Macedonian kingdom. On the one hand, we are told that the march of contemporary events never budged him from believing the small compact city-state to be the only good form of government, and that Philip and Alexander might as well have never existed so far as his political theory was concerned.[22] But we are also assured to the contrary that Aristotle was flexible and open-minded, that he learned much about the advantages of beneficent tyranny from his association with Hermeias, and was fully alive to the dangers, as for example the disunion and weakness of Greece, attendant upon the city-state type of political unit. The result was, according to this view, that while he still urged smallness and compactness and a quasi-Platonic constitution upon the Greek commonwealths, he also saw the necessities and possibilities of a larger political unit, the kingdom, of which the city-states might be the components. And for the constitution and rule of this new form of government, which he was quite aware was materializing before his eyes, he had quite different ideas. In fact, his dream was truly imperial. The whole Greek world, with Macedon as its core, was to form a single state submitted to a single head. This head was to be a veritable "All-Highest," transcending constitutional limitations and reigning by the grace and force of an inborn kingly nature and personality. For this rôle, we are told, of autocrat of a Greek Empire and vicegerent of Hellenism on earth he cast and trained Alexander. And as the Asiatic adventure expanded into universal conquest, he really pinned his hopes on the political and moral domination of the world by Greek arms and Greek ideals.[23]

If this be true, Aristotle's provincialism lay not so much in a failure to rise above a multitude of petty city-states to the concept of a pan-Hellenic monarchy, as in an inability to take the last step with Alexander and to see that monarchy in its turn as a component in a still wider federation and fusion of peoples and cultures. This step, however, was well-nigh impossible to anyone born and bred in the old-fashioned Greek

22 *Cf.* Taylor, *op. cit., loc. cit.*

23 Jaeger, *op. cit., loc. cit.*

tradition of disdain and dislike for everything that was "barbarian," that is to say, non-Greek. The distinction, we are told, meant almost as much as the "color-line" does in the southern United States to-day.[24] It certainly meant as much as, if not more than the line the insular Englishman or the "one hundred per cent" American draws between himself and the rest of the world. Aristotle was deep-dyed in the prejudice, and Alexander's later cosmopolitanism did not soften, but only helped embitter it.

Whether Aristotle held his job and remained at court till the actual accession of Alexander is doubtful. Athens, with her back to the wall, was rallying to her support the rest of Greece, now thoroughly alarmed and disillusioned, and had succeeded even in detaching Byzantium and Perinthus, an important town on the Sea of Marmora, from their alliance with Philip. And Athenian troops had crossed over to the island of Euboea, and sent the pro-Macedonian elements there packing. Open war was now inevitable. Philip laid siege to Perinthus with all the newest wrinkles in battering rams, catapults, and storming towers, and then to Byzantium. In his absence, he made Alexander regent—a position that can have left little time for lessons, and rendered Aristotle's presence superfluous.

Moreover, Philip had his hands full for some time to come. The Athenians, seeing their lines of communication with their food supplies in the Black Sea threatened, began open hostilities, and sent a fleet which raised the siege and forced Philip to retire into Thrace. And in the south the allies carried the war into Thessaly. For the moment, too, the king's hands were tied by a threatened invasion of barbarian tribes from the north, and he was forced to forego an immediate revenge and leave the Athenian war to its own devices, while he dealt with this new danger. So there can have been no let-up in Alexander's new duties, which apparently he only relinquished to accompany his father in the field when Philip at last resumed the campaign against Greece.

When that time came, the king moved rapidly south, and was

[24] Taylor, *op. cit.*, p. 11.

suddenly in Boeotia threatening an immediate advance upon Athens. The Allies, reinforced by Thebes, confronted him at Chaeronea (339 B. C.), only to be overwhelmingly defeated. There the eighteen-year-old Alexander, in command of one wing of the Macedonian army, received his baptism of blood. Nor were his first adversaries unworthy of him. Opposed to him were the Theban forces, including the famous Sacred Band, not one of whom, so the story runs, was left alive, and whose mute courage as they lay dead upon the field of honor moved even Philip to tears and praise.

Aristotle, meantime, was watching the end either from Pella, or, if he had severed his connection with the court at the time Alexander was made regent, from his native town of Stagira. He had not long to wait. All Greece was now at Philip's mercy. But the king in the hour of victory showed a wise and unexpected moderation. Athens, having prepared for a last, desperate stand and a long siege, was offered and accepted honorable terms of surrender, which left her still an autonomous, though a vassal state. And the next year, at the Congress of Corinth, a similar leniency was extended to the rest of Greece. Philip was to be overlord and generalissimo of the confederate forces, but each city was left free to manage its own internal affairs. Macedonian garrisons, however, were stationed at Thebes, Corinth, Chalcis, and other strategic points.

By this time Alexander was already immersed in military life, and a general at that, and Aristotle may well have felt that his job was finished. In any case, Philip's sudden and violent death left him not the slightest doubt. The king, having become enamored of the daughter of one of his high officers, took it into his head to divorce his chief wife, Alexander's mother, and to marry and promote his new love in her stead. The court of course was in a twitter, and Alexander not unnaturally flew into one of his rages. At the wedding breakfast he figured in a disgraceful scene in which he threw a cup at the head of the bride's very intoxicated uncle, who had expressed an indiscreet wish that the new queen might produce a proper heir to the throne, and then he had grossly insulted the equally drunken bridegroom who had fallen on the floor—be-

tween two beds, as Alexander remarked—trying to intervene. After the wedding he went off in a huff with his mother to Epirus, and Philip had considerable difficulty in getting him to return. Certain friends of the deposed queen, however, were more deadly if less demonstrative in their anger. A conspiracy was formed, to which Olympias was supposed by most, and even Alexander by some, to be privy. A willing tool was found who already had a grudge against the king, and at an opportune moment, at the wedding of one of his daughters, Philip was assassinated (336 B. C.). Alexander was now king of Macedon, and Aristotle's task was definitely at an end.

For a moment Greece was uncertain what kind of boy this Alexander might be, and there was an ominous stir among the vassal states. But she learned in short order, for in no time Alexander was on the spot, backed by thirty thousand men. The cities could not be too quick in recognizing his succession to Philip's overlordship, and in six months all was quiet again. A rumor of his death some months later, and history repeated itself; except that this time Thebes, which had gone so far as open revolt, was razed to the ground and her inhabitants were sold into slavery. With this salutary example before their eyes, the Greek cities could be considered pacified, and Alexander went home to plan his Iliad against the Persians.

Aristotle was now probably at Stagira, which Philip had rebuilt at his behest. But for some time he must have been meditating a return to Athens. It was by all odds the most congenial place for literary and scientific work, and it was full of old memories and old friends. So long as the war was on, and in the uncertain time that followed Philip's death, it would have been unwise to go back. But now things were well in hand again and seemed likely to remain so. Alexander, to be sure, was off for Asia, lured by the shade of Achilles and the fascination of a new, unknown world to conquer, not to speak of the prospect of loot, but he was leaving Antipater behind with a full third of the Macedonian army, some twelve thousand infantry and fifteen hundred horse, to keep an eye on home affairs. Apart from his friendship with the viceroy, Macedon had no claim on Aristotle and no interest for him,

now that the young king was gone. Stagira doubtless seemed all the more tame and provincial for its newness. Then, too, he found the climate too harsh. There was everything for, nothing against his going back.

The spring of 334 B. C.—the same spring that Alexander crossed from Europe into Asia—found Aristotle once more in Athens. He had been away thirteen years, and in his absence there had been at least one change that made him feel something of a fish out of water. Five years before, Speusippus had died of a paralytic stroke, and Xenocrates had been elected president of the Academy. That in a sense closed its doors to Aristotle. However cordial his relations with Xenocrates, and however friendly his feelings for the School might be, a man of his eminence and high connections, the intimate friend and counsellor of the king, hand in glove with the viceroy Antipater, and already perhaps the most renowned philosopher and teacher of the day, could scarcely associate himself with his old university in a subordinate position. Furthermore, by now he had a system of his own to develop and expound. Then, too, he had a thousand irons of scientific research on every conceivable subject in the fire, and perhaps large collections of the most varied data were already accumulating on his hands. To house and diffuse his universal knowledge and make public the conclusions he drew from it, nothing short of a school of his own would suffice.

This, like the Academy, developed from small beginnings. We first find him gathering his followers about him in a park and exercising ground in the north-eastern suburbs, dedicated to the Muses and Apollo Lyceus. This spot, known as the Lyceum, had formerly been a favorite haunt of Socrates, and here, under the trees, with Mt. Lycabettus towering above them, Aristotle and his pupils paced up and down, while he expounded his views and answered their questions. From this habit his school was nicknamed Peripatetic, or "walking-about"—a tag that stuck to it and became an official designation of the Aristotelian system. And just as our word "academy" owes its origin to Hecademus Park where Plato began to teach, so Apollo's title, which is variously interpreted

as "Lycian-born," "wolf-slayer," or "enlightener," has given us the term "lyceum."

The morning talks were devoted to philosophy and the more technical and difficult aspects of the sciences, and were intended primarily for the members of his school. But in the afternoon he held classes in rhetoric and oratory which were attended by such large numbers that he had to abandon his habit of walking about, and to lecture sitting down. We can see him there under the trees or the colonnades, just as we saw Socrates there eighty years before—a man just turning fifty, already bald, pot-bellied too, one unkind description says, thin of leg, small-eyed, extremely and even ostentatiously well dressed, with a mocking and sarcastic way of speech, and still with his boyhood lisp. His manner, if he in any way lived up to his professed ideal of the distinguished man, must also have been somewhat self-conscious and pompous. Altogether, we may suspect him of having been something of a dandy, a wit, and a snob.

The instruction given by Aristotle was but a fraction of his work. Into the next twelve years he crowded almost all of his extant writings and many lost ones—in itself a prodigious output for the short length of time. Nor was this all. His writings were the outcome of a profound and minute study of an overwhelming mass of data drawn from every conceivable field of contemporary scientific research. Mathematics, physics, astronomy, biology, physiology, anatomy, botany, natural history, psychology, politics, ethics, logic, rhetoric, art, theology—all were grist to his mill. Nothing escaped his eye or his ear, and everything he saw or heard of he investigated, from the philandering of elephants to the nature of God and the constitutions of one hundred and thirty-eight Greek cities. Never before or after has there been a human intellect that compassed at first hand and digested the whole body of existing knowledge, or one that held so vast a variety of fact in a single perspective. And, quite apart from the range and grasp of fact upon which it rests, this perspective still ranks in itself after the test of twenty-two hundred years as one of the supreme achievements of the mind of man.

Although Aristotle was comparatively rich, his private means could never have sufficed for the expense of his investigations and collections. His researches, while he was in Macedon, had been largely financed by Philip, and later Alexander came to his aid, and is said, probably with some exaggeration, to have contributed some eight hundred talents, or between one and two million dollars gold, with of course a far larger purchasing power than the sum would have to-day. The king, we are told, also placed at his disposal all the fish and game and forest wardens of the kingdom, with orders that anything new or interesting should be reported to him. But if this is true, the eyes on the lookout in Asia were apparently so agog at elephants and other sizable wonders that they left Aristotle blind to a host of lesser novelties.

His growing school, his collections, his maps and his instruments needed housing also. As a foreigner he was forbidden by Athenian law to own land in the city. But at a later date, under a new régime, we find his successor, Theophrastus, also an alien, confirmed in the possession of ground and buildings adjoining the exercising field. These, or at any rate the land, we may assume, had been rented by Aristotle and developed as the need arose. In Theophrastus' time, for example, we find mention of a colonnade devoted to a display of maps, a college chapel dedicated to the Muses, and several houses. Also, there must have been a library. Then, too, student life at the Lyceum was modelled upon that at the Academy. There was something in the nature of a commons, for which Aristotle himself drew up the rules, where the pupils dined together and held symposia, or convivial meetings devoted to good drink and philosophic converse. Residential halls seem also to have sprung up, and later we hear a complaint, also once levelled against the so-called "Gold Coast" at Harvard, that these halls had become too luxurious and too expensive for any except the rich students. Like Plato, Aristotle found it necessary to have assistants, among whom we may note Theophrastus and Eudemus of Rhodes—not to be confused with the friend of Aristotle's youth—to whom the "*Eudemian*" *Ethics* is attributed by many critics. And again, like Plato,

he drew not so much upon Athens itself as upon the outside Greek-speaking world for the majority of his pupils.

Under the leadership and inspiration of so towering a personality the Lyceum quickly overshadowed its rival university. Many people attended lectures at both institutions. Some jealousy there must have been, but Aristotle seems to have kept on pleasant and friendly terms with the Academy leaders. At the same time he had his enemies. Athens, for all her pacification, and although her head—her intelligentsia—was reconciled to the new order, was still anti-Macedonian at heart. And anyone so near the throne of the conqueror as Aristotle, and so identified with Macedon, could scarcely have escaped suspicion and dislike in many quarters. In the eyes of the irreconcilable Demosthenes and other extremists he probably figured as a Macedonian spy, and his letters to his old friend Antipater, with whom he kept up a correspondence, as so many secret intelligence reports. But Aristotle managed the situation with great tact. We hear nothing of any unpleasantness with Demosthenes, and the character and the learning of the leaders of the new school were such as to command respect from all parties.

Although, then, the next twelve years were to be inwardly a period of intense intellectual effort and incredible productivity, outwardly they were to pass on the whole quietly. But they were not entirely placid and unchequered by sad or trying incidents. It would seem to be some time after his arrival in Athens that his wife, to whom he was devoted, died, leaving him with his young daughter on his hands. He had also adopted the orphaned son of his former guardian, Proxenus, out of gratitude for the kindness and care he had received in his boyhood. Shortly after the death of Pythias, he became attached to a lady from Stagira named Herpyllis, whom, however, he never legally married. Their union was in all respects happy, and by her he had a son of his late middle-age, named Nicomachus after his grandfather. The boy later became something of a philosopher himself, and edited the notes of one of his father's lecture-courses—now known to us as the *Nicomachean Ethics.*

Aristotle's life at Athens was also clouded by the growing coolness between himself and Alexander. Various causes contributed to the estrangement. In the first place the king was proving more and more rebellious to the strictly Greek ideals that his tutor had done his best to instil, and showed a lamentable tendency to break down the barriers and leap the gulf that in Aristotle's opinion naturally separated "God's own" superior Hellenic principles, institutions, and ways of living from those of everybody else. For Alexander, however sincere he may have been at first in his rôle of great Achilles fighting an inferior and alien Troy, had barely landed and sacrificed patriotically to the shade of his crusading ancestor, before he began to find that Troy, too, had its amenities, its virtues, even, treasonable thought though it was in a good Hellene, its superiorities. He succumbed to the effete East as now and then an American or a Britisher grows weak-kneed before the decadent charms of Continental Europe. He no longer regarded the peoples whom he subdued as naturally inferiors and slaves. His eyes were opening on a richer, wider, more interesting world that it took all sorts of men besides the Greeks to make. The old Aristotelian ideal of pan-Hellenism and of Greek culture with its foot upon the barbarian neck was giving way before the dream of a fusion of barbarian and Hellene on equal terms in a new, Alexandrian civilization. Of this subtle, inward, and invisible change of mind and heart the transference of the capital, even temporarily, from Pella to Babylon was the outward and visible sign.

Aristotle could have no sympathy with the vision breaking before his former pupil. It was nothing but miscegenation to him, of the rankest sort. Alexander had gone back upon the teaching instilled into him at such pains. He had failed to keep the Hellenic faith pure and to uphold the prestige and the supremacy of the Greek race. He had laid down the "white man's burden" and "gone native." It was disappointing and deplorable.

Equally disquieting were the reports of the king's behavior. He had married one Bactrian and two Persian princesses, and it looked as if Macedon and Greece would fall eventually to a

half-bred, Eurasian heir. That he sought to establish his invalided or retired Macedonian soldiery in new cities of his founding was, after all, compatible with the Greek idea of colonization, but he had done everything possible to persuade and even bribe both officers and privates to take Asiatic wives. Persians had been nominated to positions of honor and responsibility, both civil and military, and he had supplemented and to some extent substituted his Macedonian veterans with a corps of Asiatic youth, the so-called Epigoni, whom he treated not as "native-troops" but as the social equals of his European soldiery. His own manner of life, also, was becoming orientalized. On his shoulders had fallen the mantle of Persian royalty; he was now Great King, as well as king of Macedon, and he took his new part seriously and played it with zest. He assumed the imperial purple and the tiara of the fallen Darius, and surrounded himself with the pomp, the splendor, and the luxury of an Oriental court. Even when on the march, his camp had all the state and retinue of a royal residence, such as secretaries, pages, chamberlains, gentlemen—and ladies—in waiting, and an elaborate etiquette. Every night there was a formal dinner to which fifty guests or so had the honor of the king's command. And these dinners were only too apt to end *à la Macédoine* in an uproarious drinking bout.

To cap the climax and add positive insult to the injury already done true Hellenism, Alexander desired his courtiers when they entered the Presence, not only to do him homage with a gesture, the blowing of a kiss, associated in the Hellenic mind with the worship of the Gods alone, but at the same time to prostrate themselves before him—an act most repugnant to the self-respect and dignity of the Greeks, who prayed even to their Gods standing and looking them in the eye.[25] The reason for his insistence was even more shocking. It was not only that Persian court regulations had prescribed the ceremony for those presented to the Great King, but also that owing to the fulsome praises of the oracle of Ammon in Egypt he had really come to believe himself to be the son of Zeus and divine. And not only was he arrogating divinity and worship

[25] *Cf. Journal of Hellenic Studies,* Vol. XLVII, Part I, 1927, pp. 53 ff.

to himself, but he had gone so far as to inquire of the oracle whether his bosom-friend, Hephaestion, who had played Patroclus to his Achilles, and who had died in Persia, might not also be honored as a God. We may note that this hedging of a king with divinity became a commonplace of the Hellenic and Roman worlds, and persists to-day in the "divine right" by which some monarchs still rule—at least on coins and postage stamps. Accounts of these doings, as they reached Athens, must have been so many nails in the coffin of Aristotle's hopes. He may well have been disapproving and discouraged.

Alexander, on his part, was beginning to be out of conceit with his old teacher. Very likely he was conscious of Aristotle's disapprobation, and was irritated by it. But, what was far more serious, the philosopher was intimate with Antipater, and Antipater was falling out of favor. He and the Queen-Mother, Olympias, were at swords' points and bombarded Alexander with complaints of each other's conduct. So long as Hephaestion was alive, the viceroy had had an all-powerful friend at court to stand up for him, but since the favorite's death the dowager Queen, who had always had great influence with her son, was in the ascendant. Moreover, treachery was the bane of Alexander's life, and he had already good cause to be suspicious of many of his officials. Antipater, for all his staunch loyalty, was too distant, too out of hand, too able to knife his master in the back if he had wanted. True, Alexander had two of his sons as hostages, but that was not enough to prevent or dispel distrust. And Aristotle's intimacy with Antipater put him, also, upon the doubtful list.

This chronic disaffection on both sides was soon brought to a head. Aristotle's nephew, Callisthenes, had accompanied Alexander, upon his uncle's recommendation, as historian of the expedition. He seems to have been an austere, unbending, and wholly worthy young man, with a very good opinion of himself, and no tact, geniality, or sense of humor. He was not a good mixer or drinker, and, as so often happens, cloaked his inferiority complex with a superior attitude of glum and scornful disapproval towards the conviviality in which neither his heart nor his head permitted him to join. Naturally, he

was pretty much of a wet blanket at the royal parties. Alexander's assumption of Oriental manners and customs he could not abide, and to the king's taste for flattery he declined to pander. As for impieties and indignities like the blowing of the kiss and prostration before the Presence, he flatly refused to be a party to them, and he protested publicly against them and against the king's pretensions to divinity in a quite blunt and tactless though, it must be said, forceful and courageous way. Alexander was furious, but he dared not take peremptory measures, knowing as he did that Callisthenes voiced the real feelings of a large party at court. He nursed his grudge, however, and bided his time, which came with the discovery of a plot against his life involving some of the royal pages. Callisthenes, who was innocent of any connection with the affair, was accused of having contributed to it by the example of his disrespectful attitude and unrestrained language, and was promptly put to the torture and hanged. In the heat of the moment, Alexander flared up against uncle as well as nephew. He wrote a violent letter to Antipater in which he insinuated that Aristotle was responsible for Callisthenes' behavior and was generally giving comfort to the king's enemies in Athens, and threatened to get even with him yet. Fortunately, however, he was too taken up with his projected expedition into India to do more than threaten. But we may guess the effect upon Aristotle of the outrage done his kinsman, and of the unjust and irrational suspicion of himself. And his uneasiness, his depression, and his anger were probably not soothed by the fact that his stomach had been bothering him of late.

Meantime the Fates sat spinning and held the shears ready for the two lives they had so closely interwoven. There was one point in which Alexander might have more completely orientalized himself to his own advantage, and with Aristotle's approval. He might have drunk less. For although Plutarch tells us that he was continent in all things of the body, "no greedy-gut, but temperate in eating," and "was thought to be a greater bibber than he was,"[26] drink that was moderate and reasonable enough in Macedon might prove excessive in the

[26] *Alexander;* North's translation.

tropical climate to which he was now subjected. His constitution was tried enough already by overwork, and in the spring of 323, after his return from India, he came down with a fever caught while overseeing improvements to the channel of the lower Euphrates. He returned to Babylon a sick man, but persisted in living at his usual high pressure.

Curiously enough, though, it was his beloved and extravagantly lamented Hephaestion who was his undoing. The oracle of Ammon, apparently averse to setting a precedent for unlimited deification at the king's caprice, and yet discreetly desirous of rendering to Caesar as well as to God, had replied, after a long delay, that though the dead favorite was not entitled to full divine rank and worship, he might be honored as a demi-god or hero. On receipt of the message Alexander proceeded to celebrate with great pomp the long deferred obsequies of his friend. Intoxication was in those days, as it still is in some places with us, a common form of showing respect to the departed, and, down with malaria though he was, he devoted two successive nights of drunkenness to honoring Hephaestion's memory. The result was that within a fortnight he himself was dead. He was not quite thirty-three and had reigned nearly thirteen years. On his deathbed he gave his signet ring to the senior officer of his household, Perdiccas, and left his empire, characteristically, "to the strongest." Although there seems to be no doubt that his death was due to natural causes, it was not long before slanderous tongues began to whisper that he had been poisoned by Antipater's sons, at the behest of Antipater and Aristotle.

Thanks to the energetic measures of Perdiccas, supported by the cavalry regiments, the empire was not immediately shaken to pieces by the shock of Alexander's death. The Bactrian wife, Roxana, was pregnant, and the bulk of the army remained loyal to the unborn heir. The infantry, to be sure, put forward an illegitimate and half-witted brother of the late king as a candidate for the throne, but his pretensions were promptly squashed. Perdiccas became regent of the empire, and under him the high officers divided up and took over the rule of the different provinces. Antipater was confirmed in

his viceroyalty of Macedon and Greece. But he had no easy task on his hands. All Greece was in an uproar at the news that Alexander was no more. Athens under Demosthenes sounded the call to liberty, and marshalled ally after ally to the cause. So sudden was the uprising that it caught Antipater unprepared, and it took over a year of hard-fought war to get the situation under control again.

Very early in the game Aristotle had found himself obliged to leave Athens. Feeling had run particularly high there, and anyone of known Macedonian sympathies or affiliations was in danger of his life. The philosopher, in spite of his detachment from politics and his quiet and inoffensive life, could not but be an immediate target. In the absence of any evidence against him, his enemies proceeded to make the never-failing appeal to the religious intolerance of the Athenians—the blind spot in their intelligence, just as bigotry in sociology and ethics is the blind spot in ours. The hymn he had written in memory of Hermeias was dug up and interpreted as a deification of his friend. Upon this and the assertion that Aristotle had also offered sacrifices to the martyred prince his accusers based a charge of offense against the established religion—a charge that inflamed much the same passions and prejudices in the conservative bosom then as the charge of questioning the established political, moral, or economic order inflames in it to-day.

Mindful of the fate of Socrates, and not wishing, as he said, "to give the Athenians a second chance of sinning against philosophy," Aristotle decided to get away from Athens before it was too late. He left Theophrastus in charge of the Lyceum, and retired to a safe distance at Chalcis, where he owned a country-house inherited perhaps from his mother. But though he had escaped death at the hands of the Athenians, it lay close in wait for him. The stomach trouble that had been bothering him for some time had steadily grown worse. The wonder was, we are told, not that he did not live to be older, but that he lived as long as he did. For a year he lingered, bearing his illness bravely. In the summer of 322 B. C., a little more than a year after Alexander's death, and just as the

Greek revolt was finally collapsing and Athens was about to surrender unconditionally to Antipater, he died.

A few months later, Demosthenes, too, came to an untimely end. A price was set on his head, and a proscribed and hunted man, he fled from Athens and took sanctuary in the temple of Poseidon on the island of Calaurea. Here he was tracked down by Antipater's agents, and rather than fall into their hands he killed himself by taking poison. Thus, almost with a single gesture, the stage was swept clear of three of its greatest characters, and three of the great figures of all time.

Aristotle's somewhat dandified and seemingly affected appearance and manner clothed not only a gigantic intellect but a very human and kindly heart. The brief will he made in Chalcis that last year is no less a monument to the one than the volumes of lecture notes that have come down to us as his works are to the other. As executor he named Antipater, and made other friends, with the special request that Theophrastus should serve, the guardians of his children and trustees both of his own estate and of the properties he himself had held in trust. He provided for the marriage of his daughter to his foster-son Nicanor or to Theophrastus, if possible, and confided to whichever married her the care of Herpyllis as well, and of the little Nicomachus, bidding him cherish the boy as a father and a brother would. To Herpyllis, remembering how good she had been to him, he wished a happy marriage, and left her money, certain slaves, and either a house on the farm at Chalcis, or the town-house in Stagira, as she chose, with suitable furniture and appointments. His other slaves were to be kindly treated and in many cases freed. The trustees were also told to erect memorials to his mother and to the foster-parents who had taken him in as an orphan, and Nicanor was enjoined to make certain votive offerings vowed by Aristotle in case his adopted son returned safely from the wars. And wherever he was buried, the bones of his dead wife Pythias were to be laid beside him, according to her last wish. His manuscripts and his library were already in the possession of Theophrastus.

II

The death of Theophrastus some thirty-five years later abandoned Aristotle's works to an adventurous career.[27] Left, along with Theophrastus' own writings and other books, to a friend and pupil named Neleus, they were carried away by him from Athens to his home at Scepsis in the Troad. Soon afterwards the town came under the dominion of the recently established kingdom of Pergamus, whose monarchs in their eagerness to enrich the royal library were requisitioning their subjects' books. Neleus' heirs, to whom his collection had been bequeathed, promptly hid it in a cellar to prevent its seizure, and there it lay for nearly a hundred and fifty years, a prey to worms and damp. Unearthed at length, when the death of the last king of Pergamus in 133 B. C. and the bequest of his kingdom to Rome had put an end to the predatory tendencies of the royal library, it was sold by its owners to a rich Peripatetic at Athens, one Apellico of Teos. Thus the original texts became accessible once more to scholars, and served to round out a knowledge hitherto dependent upon copies, and these perhaps only of a portion, and, it may be, not the most important portion, of the Aristotelian writings.[28] The manuscripts, however, were terribly mildewed and wormeaten, and in a state of great disorder. Apellico did what he could to edit them, rearranging the pages, filling in the worm holes, piecing out the torn sheets, and re-writing what had become illegible to the best of his conjecture. But as he was not much of a philosopher most of his conjectures turned out to be very incorrect, and his publication was full of mistakes. Moreover, it was difficult to know just what was Aristotle, and what Theophrastus.

In any case, the newly discovered library was not destined to remain open to Athenian inspection long. Athens had been playing fast and loose with Rome, and had finally been inveigled by Mithridates the Great of Pontus, the chief enemy of the Republic at that time, to make common cause with him in

[27] For a detailed account *cf.* Grote, *Aristotle,* I, pp. 50–57; Zeller, *op. cit.,* I, pp. 137–139.

[28] On this point *cf.* Grote, *Aristotle,* I, p. 57; Zeller, *op. cit.,* I, pp. 139 ff.

his campaign against her. The result was disastrous. Greece was overrun by Sulla, Athens was taken and looted, and Apellico's library was carried off to Rome as part of the conqueror's share of the spoils. There it was kept in charge of a custodian, somewhat difficult of access, but still open to scholars, among them Andronicus of Rhodes. The latter reclassified and re-corrected the Aristotelian manuscripts, though it had become by this time impossible to recover with any accuracy much of the original meaning. His publication aroused a new interest in the great "master of those who know," giving Roman philosophers, as it did, a systematic and practically complete edition of the text and perhaps their first introduction to some of the more important writings. Some critics, indeed, have maintained that many of the more profound treatises were actually lost to the world for the century and a half that the manuscripts lay rotting in the cellar of Neleus' descendants.[29] But this is rejected by others who hold that copies of most of the philosopher's writings were extant during the interval, not only in the Alexandrian Library, but elsewhere.[30] In any case the service done by Andronicus cannot be too highly estimated, and it is largely from his edition that such works of Aristotle as we now possess have come down to us.

The scholars of antiquity, however, whether through his edition or otherwise, were in possession of many writings now lost. These included some nineteen popular treatises, most of them dialogues modelled upon Plato's, as well as poems, letters, and essays. Again, ancient criticism rejected as spurious or suspicious some things that modern commentators regard as genuine, and accepted as Aristotelian some things that we to-day reject. To give in detail the list of the extant works generally considered authentic would be unnecessarily laborious, but we may mention some of the more important and more widely known. On the subject of logic there are the *Categories*, the *De Interpretatione*, the *Topics*, the *De Sophisticis Elenchis*, and the *Prior* and *Posterior Analytics*, which taken together form the *Organon*. In the field of the physical

29 *Cf.* Grote, *op. cit., loc. cit.*

30 Zeller, *op. cit., loc. cit.*

sciences we have the *Physics*, the *De Caelo*, the *De Generatione et Corruptione*, and the *Meteorologica*. Dealing with what we should to-day call psychology, physiology, and biology we have the *De Anima*, the collection of treatises known as the *Parva Naturalia*, the *Historia Animalium*, and other works in natural history. Then we have the *Metaphysics*, the *Nicomachean* and the *Eudemian Ethics*,[31] the *Politics*, the *Rhetoric*, the *Poetics*, and finally the chapter from the *Constitutions* on the *Constitution of Athens*, lately recovered[32] from an Egyptian papyrus.[33]

31 The modern tendency seems to be in favor of the genuineness of the *Eudemian Ethics*.

32 In 1890.

33 This list follows Ross, *Aristotle*, pp. 7 ff.

## CHAPTER II

## DEVELOPMENT OF ARISTOTLE'S METAPHYSICAL THEORY

### I

The Aristotelian philosophy, like the Platonic, was not brought into the world in a basket by a stork, and full-grown at that. It had its period of pre-natal development, embodied a continuous evolution of thought, and never reached a point at which the process of revision and enlargement altogether ceased. In other words, Aristotle stopped thinking only when he died. This fact is apt to be obscured by the tendency of historians of philosophy to minimize the occurrence of growth in philosophic systems and to treat them for the most part as if they sprang from their author's brains, like Athene from the head of Zeus, mature and fully armed. Thus in Aristotle's case we might gather that his first and immediate reaction to Plato's teaching was one of complete disagreement, that his final criticisms were formulated all at once, and that upon them his philosophy arose with little or no deviation from an original plan. At least, his works are frequently taken as if they had no history, were all contemporaneous in spirit, and were each a consistent whole, written at a single stroke of the pen and expressive throughout of a uniform ripeness of judgment.

This method, it must be said, has its advantages. It enables us to deal with a thinker subject by subject, and to give an account of his psychology, or ethics, or metaphysics as if the factor of time did not exist. Moreover, Aristotle lends himself more readily than Plato to such treatment. His thought is more sober, more coherent, and more conclusive. With respect to him there could never arise, as there has arisen in

Plato's case, the question whether violent alterations did not take place even in his more mature system. The growth of his philosophy was not subject to quick variation. Still, as modern critics are beginning to insist, there was an evolution, which has left what the biologists would call marked vestigial structures, easily recognizable if only we are on the lookout for them. And from these traces the stages through which Aristotle's thought passed can be reconstructed with some accuracy.

For example, we are warned not to draw our picture from the extant works alone but to include in it so much as we know of the dialogues. Nor can we take many of the more important writings as unitary compositions reflecting throughout one and the same opinion upon the subjects with which they deal. We must rather regard them as compilations in which earlier or later views were indiscriminately mixed at the hands of those who arranged his notes. And once so regarded, they show that Aristotle changed his mind little by little in ethics, politics, psychology, physics, and metaphysics, as his system developed. They indicate, furthermore, that this change was on the whole a movement away from Plato, from the supernatural, from causes and sanctions that dwell on high, towards a scientific realism and naturalism.[1] As this is the more human and interesting way of looking at the matter, and as there is good authority for it, let us keep it in mind during our discussion.

We turn back, then, to the earliest writings. Of these, we may remember, we have fragments and accounts of two, a dialogue, the *Eudemus*, and an exordium in the style of Isocrates, the *Protrepticus*. Both date from Aristotle's Academy days. The former it will be recalled, was written on the occasion of the death of a fellow-pupil and bosom friend who joined Dion's ill-starred expedition against Syracuse and fell in battle there. Aristotle's grief found consolation in meditating upon the immortality of the soul, and particularly upon the proofs offered by Plato in the *Phaedo*. The *Eudemus* was the outcome of his meditations.

In it Aristotle argues particularly against the doctrine,

1 This is the thesis of Jaeger's *Aristoteles; cf.* also Ross, *op. cit.*, p. 19.

already attacked in the *Phaedo*, that the soul is a harmony of the body and as such is subject to destruction when the body dies. The logic of his argument is much more complicated than Plato's and shows signs of growing independence, but the conclusion to which it brings him is essentially the same. The soul is a substance, a self-supporting entity, whereas harmony is not. She can, then, survive in her entirety the destruction of the body. This doctrine, it will be noted, throws back beyond the distinction made in the *Timaeus* between a mortal and an immortal part of the soul to the simpler doctrine of the immortality of the whole soul that the *Phaedo* sets forth. How Aristotle himself later veered towards the idea of the soul as a function of the body, came to distinguish an imperishable from a perishable part, and abandoned personal immortality we shall soon see.

The dialogue would appear also to reflect, with an exaggerated pessimism if anything, the dualistic, anti-worldly strain in Plato's teaching. The incompleteness, the limitations, and the imperfection of the world of becoming are contrasted with the perfection of the realm of pure being where alone the true good can be found. Indeed, Aristotle feels, it were almost better never to have been born and never to have entered the flux at all! Finally there are evidences of a belief in the Ideas, in the pre-existence of the soul, and in the Platonic theory of knowledge as recollection of what the soul has seen before birth.[2]

Strongly Platonic traits also mark the *Protrepticus*, a plea for the philosophic life addressed, as we have seen, to the Cyprian prince, Themistion. Here the practical wisdom or prudence that should inspire the activity of rulers is regarded as the immediate offspring of the Platonic vision of true being and as a function of the divine part of the soul. Both ethics and politics are proclaimed exact sciences, and the moral law is endowed with the absoluteness and certainty of a mathematical formula, quite after the fashion of the *Philebus*. In fact, the rules that princes should observe are to all intents and purposes the Platonic Ideas, and legislation is good in pro-

[2] *Cf.* Jaeger, *op. cit.*, pp. 37–52.

portion as it conforms to these higher realities. The king should be a philosopher, for it is only the philosopher who contemplates the original rather than the copy and imitates Reality directly. And only in meditating upon and imitating the invisible and the eternal can salvation be found. For the soul's association with the body is contrary to her nature. Subjected to its imperfections, she is like one fallen among thieves, and left by them to perish, bound to a corpse. Death is a happy relief for her, since through it she returns to the higher life which is her birthright.[3]

Here, as in the *Eudemus*, we shall presently note the extent to which Aristotle eventually modified his views. We are already prepared, of course, to find him minimizing the opposition between soul and body, as his psychology developed, and emerging from the mystical, Platonic-Orphic dualism of his youth. But we shall also see him abandoning the idea of an absolute good and an absolute morality, whether social or individual, turning ethics into a purely human concern, and drawing a sharp line between philosophic contemplation and the wisdom that has to do with practical affairs.

These transitions, however, were still in the future. If the reconstruction of the *Eudemus* and *Protrepticus* is to be trusted, it indicates that Aristotle began his philosophic career by deliberately swallowing a good part of the Platonic doctrine, hook, line, and sinker, and that he showed no inclination to break away while he was still a pupil at the Academy. The first signs of restiveness and of liberation from Platonic influence belong to the time he spent at Assos and Mytilene immediately after Plato's death and to the early years of his residence at the Macedonian court. From this period, we have seen, date the earlier portions of the *Metaphysics* and *Politics*, the *Eudemian Ethics*, and probably the dialogue *On Philosophy*.

Of this dialogue, the first part, which looks as if it were an expansion of the first book of the *Metaphysics*, gave a critical history of philosophical and religious speculation up to date. Inspired doubtless by the interest the Academy took in Zoroas-

[3] *Cf.* Jaeger, *op. cit.*, pp. 80–102.

trianism and Chaldean astronomy, it pushed the beginnings of thought back to the Magi, and it also had much to say about Hesiod, the early cosmogonies, the Orphics, and the Seven Sages. It culminated naturally in Plato, whom Aristotle treated with the greatest respect as the high-water mark of the rising tide of philosophy. Having, however, thus paid his respects to his master, Aristotle turned, in the second part, with some sharpness upon the Platonic teaching. Unfortunately, almost none of his criticism has come down to us, but we know that it was directed against Plato's distinction between Numbers as Ideas and numbers as mathematical entities. And, even without the supporting evidence of the contemporary portions of the *Metaphysics*, it is sufficient to show that Aristotle was off on his own path at last.[4]

The third part of the treatise gave the new view of the world that this path had so far disclosed to him. The picture was still essentially Platonic, but shrunken as compared with Plato's canvas. The Ideas, now under grave suspicion, were conspicuously absent from it. Furthermore the Creator had been painted out, for Aristotle by this time openly dissented from his master's teaching that the universe was created. It was rank atheism he felt to suppose that this stupendous visible God, the world-all, could have a beginning or an end, or could be brought into being, or deprived of its existence, or even radically altered by an outside hand. The universe itself was obviously divine—and particularly the heavens, which Aristotle, following Plato's lead in the *Timaeus*, peopled with star-gods. And, as if to accent its divinity, he brought forward a fifth element, the aether, finer and purer than fire, as the substance of the celestial bodies and the proper *milieu* for their august inhabitants. So complete and splendid a whole must be uncreated, indestructible, unchangeable, in a word, eternal. By holding to this theory of the eternity of the world, Aristotle ranged against him not only the Platonists but the already fashionable belief in recurring world-cycles and catastrophes which later was to be taken up and made much of by the Stoics. But Aristotle continued to maintain his view till

[4] *Cf.* Jaeger, *op. cit.*, pp. 126–140.

the end of his life, and it became one of the corner-stones of his system.[5]

In evicting the Ideas and the Creator from the universe, and in proclaiming the divinity of the world-all, he did not, however, turn pantheist. On the contrary, he seems to have retained the notion of a God existing apart from the universe, who, though not its maker, was still the cause of its motion and activity. This God is pure mind, and can be approached only through the life of reason. Belief in such a deity he defended by appeals to both logic and inner experience. The existence in nature of degrees, of higher and lower, of more or less complete, shows, he said, that there must be a final standard, a most high and perfect form of being, with reference to which gradations are measured and scaled. And again, the presence of such a Supreme Being is revealed in the awe we feel at the starry heavens, and in mystical and apparently supernormal states of consciousness such as prophetic dreams.[6]

Later commentators, confused by this various ascription of divinity to such a miscellany as the popular Gods, the stars, the aether, the universe as a whole, and a being outside the universe, accused Aristotle of inconsistency.[7] And very likely their confusion reflects some lack of theological clearness in his mind at the time the dialogue *On Philosophy* was written. Still, it also looks very much as if he were already well on his way towards the famous doctrine of God as the unmoved mover of the universe—a doctrine he was soon to set forth at length in a treatise on the Divine Nature which has come down to us incorporated in the twelfth book of the *Metaphysics*.[8]

The views on the structure of the physical world set forth in the dialogues would seem to have reflected the new astronomical discoveries and enthusiasms of the epoch. Thanks to the work of Aristotle's fellow-pupils at the Academy, Eudoxus of Cnidus and Philip of Opus, there had been a general recognition of the greatness of the distance separating the earth, the sun, the moon, the planets, and the outer heavens. This had

[5] *Cf.* Jaeger, *op. cit.*, pp. 141–142.
[6] *Ibid.*, pp. 161 ff.
[7] *Ibid.*, pp. 140 ff.
[8] *Ibid.*, pp. 144–145.

upset the doctrine of the four elements by giving an immense and destructive preponderance to fire, the element hitherto believed to fill the upper atmosphere and to constitute the substance of the heavenly bodies. And it was probably for the purpose of ensuring the universe against destruction by fire that the aether to which Aristotle gave his philosophic benediction was originally invented.[9]

Moreover, observations made by Eudoxus suggested that the movements of the heavenly bodies were orderly and circular, and thus tended to confirm the Platonic doctrine that they were governed by intelligence. It may not, then, have been all pure religion and undefiled, but scientific reasoning, that led Aristotle to take over the "lesser Gods" of Plato and make them the souls of the stars. Later, at any rate, they did yeoman service as scientific explanations of the stellar motions. And already we are told that the circular orbits of the stars are due neither to nature, which inspires only straight up and down movements, nor to any other force, but solely to their free and rational will and activity.[10] However, as Aristotle became more naturalistic, this theory was abandoned, and circular motion was made the inherent motion of the aether, just as movement in a straight line was the movement inherent in the other four elements. But even so, as we shall presently see, Aristotle never got over the initial dualism of his physics, and continued to contrast the characteristics of celestial with those of terrestrial motion.[11]

## II

Luckily the *Metaphysics* besides incorporating the treatise on the Divine Nature also preserves for us the reasons that led Aristotle eventually to reject the Platonic theory of Ideas. The winter of his discontent was apparently ushered in by Speusippus and Xenocrates, who had seized all too blindly upon Plato's doctrine of Idea-Numbers and mathematical objects and had read into it meanings that their master would

[9] *Cf.* Jaeger, *op. cit.*, p. 157; Zeller, *op. cit.*, pp. 475–476.
[10] *Cf.* Jaeger, *op. cit.*, pp. 154–155.
[11] *Ibid.*, pp. 156–159.

probably not have recognized. With this tendency in the Academy to "mathematicize" philosophy[12] Aristotle was completely at odds, and he attacked the Number theory at length and in detail, not once but over a period of years, elaborating his criticisms as time went on.[13] How, he asks in his earlier objections, can we attribute substantial existence or goodness to things like Unity and Number, or make sense of the statement that the number-series is *produced* by Unity? How are we to make any valid distinction between the "intermediate" numbers of mathematics and Number-Forms? What can we have in mind when we talk of Numbers causing and creating the world of individual things?[14] And some years later we find him hammering away even more forcibly at these points and assaulting with particular vehemence the two sorts of numbers, the indeterminate dyad, and the part assigned to the dyad in the procreation of the number-series.[15]

Whether all this fault finding was directed chiefly against developments within the Academy by an Aristotle who considered himself a good Platonist engaged in clearing away rank growths of misrepresentation from his master's doctrine, or whether he accepted the views of Speusippus and Xenocrates as an accurate reflection of Plato's teaching and attacked them as such, is, as we have seen, a point disputed among scholars.[16] But in any case, if the interpretation of the Platonic theory of Numbers advanced and defended by some critics be correct it looks as if Aristotle failed to grasp the mathematical phase of the doctrine of Ideas.

The criticism of the Ideas as Numbers is attended by objections to many of their other aspects. These objections are briefly the following. The Platonic Forms, we are told, instead of explaining the world of sensible objects, merely reduplicate it. No way of regarding them as the causes of

[12] *Met.*, I, 9, 919*a*.

[13] *Cf.* Jaeger, *op. cit.*, pp. 181 ff., 194 ff.

[14] *Met.*, I, 9, 991*b*, 9–992*a*, 24; III, 4, 1001*a*, 5–1002*b*, 11; XIV, 3, 1090*a*, 2–4, 1092*a*, 1–5, 1092*a*, 22–26, 1093*b*, 29; XIII, 9–10.

[15] *Met.*, XIII, 1–8.

[16] *Cf.* also Jaeger, *op. cit.*, pp. 179–199; Robin, *Théorie Platonicienne*, pp. 439 ff.

particular things can be worked out. The so-called "participation" of the object in the Idea, or its "imitation" of the Idea, involves all sorts of contradictions and difficulties, not the least of which would be its inability to explain the movement and change that take place in the individual thing. Nor can entities like Forms, types, genera, and the like be conceived as existing in themselves apart from the particular objects of which they are the Forms. How, for example, can we conceive human nature as existing in itself apart from human beings? And, even if we could make a beginning of so conceiving types and genera, should we not end at once in a self-contradiction? For we should find ourselves thinking of universals—that is, of general qualities or natures predicated of individual things—as if they, too, were things. We should be thinking of the general as if it were a particular, of human nature as if it were a human being of sorts—a glorified, spiritual, metaphysical edition of a human being, if you like, but still a concrete, "personal" man.

In short, the universal has no concrete existence of its own. It is not a subject but a predicate, not a thing but an attribute of, or a truth about a thing. It is not then a power, and it is not suited for the rôle of a first principle. And if we try to force the part upon it we soon discover that we can at the most only derive other universals from it, as one truth may be deduced from another, but never a concrete fact.[17]

Whether these criticisms are well founded, or whether they rest on a serious misunderstanding of the Platonic doctrine, they are at least invaluable signposts of the direction in which Aristotle's thought is moving. They indicate what his problem is and how he must meet it. In the first place, his criticisms obviously might prove a boomerang and recoil upon himself. For it was a question whether the doubts he had cast upon the separate existence of the Platonic Ideas did not equally militate against the existence of any sort of supersensible being. After all, was there anything in Reality, any phase or aspect of Being, that could not be covered and exhausted by the physical

[17] *Met.*, I, 9, 10, 990*a*, 30 ff.; III, 6, 1002*b*, 10 ff.; XIII, 9–10, 1086*b*, 15 ff., 8, 1086*a*, 30 ff.

and biological sciences? But if there were not, then what would become of Aristotle's God? Surely he too would have to go the way of the Ideas, the Creator, and the World-Soul of Plato. And in that case farewell to religion, theology, metaphysics, and all speculation about anything beyond the pale of the senses.

Aristotle had, then, to keep God and supersensible Being, metaphysics and theology, from sharing the fate of the Ideas. But to do so he had to free them from the weaknesses that to his mind vitiated the Platonic theory. He must find some way of bridging the gap that seemed still to yawn between his God and the universe whose activities this God inspired. He must somehow make supersensible continuous with sensible Being. Furthermore, there was a work of repair to be done within the universe itself. Plato, he felt, had torn each individual, sensible object limb from limb, wrenching its universal and its particular aspects asunder and leaving not so much as a ligament to connect them. The result was that the sort of thing an object was no longer had anything to do with there being an *object* of that sort. The human type, for example, was in no wise instrumental in producing concrete men. It was there in them, to be sure, but only casually. The exemplification of it in a sensible order took place unbeknownst to it, without in any way affecting its nature or existence. Indeed, the whole concrete universe might disappear for all the Ideas knew or cared. This dislocation of the universal from the particular in every concrete fact had to be reduced. What made John Smith a man rather than a horse or a cow must certainly play a considerable part in bringing him into actual being as a concrete individual here and now. Human nature was surely at home and not travelling aimlessly abroad when it appeared in human beings. Or, if the Ideas were really strangers in a strange land when we met them in the sensible world, at least they had not strayed there but were on business of some sort.

Everywhere, then, throughout the universe the general type or Form displayed in the particular object and the particular object in which it was displayed had to be brought into some

sort of vital and organic relation. Plato, to be sure, after pulling them apart had tried to wire them together with intermediary beings like the Creator and the World-Soul. But although these wires were of precious metal, they were nevertheless foreign and unabsorbable materials which really held apart to all eternity the worlds they were supposed to connect. And at the best they were poor substitutes for a natural junction. Some way must be found of contriving an organic healing of the breach between the universal and the particular. The Platonic Ideas and their sensible instances must knit together without scar or seam, and become flesh of each other's flesh and bone of each other's bone. Not until their complete union had been brought about could we regard Reality as satisfactorily convalescent from the injuries inflicted upon it by the Platonic doctrine of "separation."

This did not mean, however, that we were unable to *conceive* universals as such apart from individuals. Of course, when we thought about John Smith or Tom Brown we could abstract in our minds the concept of human nature in general from the conditions that rendered its embodiment and individualization possible. We must only be on our guard against regarding these abstractions as more than abstractions, and especially as substances and first principles. After all, that with which we always found ourselves confronted and had to do business was not pure Form on the one hand and something that absolutely lacked Form on the other, but specific combinations of Form and Matter. We never ran across in the street just human nature in general or just totally dehumanized lumps of clay. We met individual *men.*

There was another inference, too, that we must not draw. Because general notions proved to be unsubstantial and abstract when separated from individual things we were not therefore to conclude, as did the Cynics and Cyrenaics, that they had no foundation in fact, and that the natures particular objects apparently shared in common were at the best a mirage of chance resemblances and had no reality. Severed from its particulars, the general type or Form exhibited by the members of a kind might wither and die, and persist only as it

was embalmed and preserved in thought. But that did not prevent it, when united to its instances, from being part and parcel of their individual existence. Human nature *in* John and Tom was a real and indispensable factor in their reality. Nay more, the severance of the universal from the particular was also fatal to the reality of the particular. Take away from a thing the *sort* of thing it is, and you have not only turned the sort into a phantom but you have destroyed the thing itself. You and I, if deprived of our human nature, lose our own souls as well. In a word, even if the Form or nature of a thing is not a Platonic Idea existing before and independent of its instances, it is as little a meaningless afterthought about chance aggregations of objects. The universal, though it *exists* nowhere else, really does exist *in* its particulars, and in them it is the very breath of their life. Along some such lines, we may safely assume, Aristotle's thought was progressing as he meditated upon what seemed to him the weaknesses of the Platonic theory. The conclusion towards which he would be led is plain enough. The individual, not the universal, the particular, not the Platonic Idea, was the centre of gravity of real existence. There was no Form without Matter, no Matter without Form. Hence Reality must be a combination of the two. And a combination of the two always meant individualization and the presence of a specific being.

At this point, however, his thought would seem to divide and waver. We are agreed, to put it more or less in his own words, that substantiality does not pertain to Form in so far as it is just Form, for a substance cannot be a predicate or definition of anything else. It is rather the subject with which definitions are concerned and to which predicates are attached. But we are also agreed that substance cannot be a mere subject, a blank substratum in which predicates inhere, like pins in a pin cushion, for then it would be wholly indeterminate in itself and would be just Matter. And whatever else substance may or may not be, it is determinate. Is, however, simple concreteness enough to make a substance? Or is individuality also required? Is the particular object a substance because it is

an *object*, a *given* datum, or because it is *this* given datum rather than that? That is the question.

At times in dealing with this problem, and especially in his polemic against the Ideas, Aristotle seems to think mere concreteness sufficient. But at others he appears to doubt whether mere concreteness is enough. We can understand his doubts. The union of Form and Matter in human flesh and blood may make me a concrete man. But it does not make me *this* man rather than *that*, since all other men are just as much combinations of Matter and Form and just as concrete as I am. The key to my being myself rather than somebody else lies in my particular nature. I am *essentially* myself and no one else. When this is uppermost in Aristotle's mind, he tends to identify substance with that which is essential to the thing's being the thing it is and nothing else. "Essence is substance."[18] Moreover, what is the concrete thing, the "primary and self-subsistent thing,"[19] if it is not one and the same as its essence? Take from it that which makes it *this* thing and no other, and you have also removed from it that which makes it *any*thing at all. Concreteness, then, it might seem, could always be sharpened down to individuality and find its point in the possession of a distinctive nature or essence.[20] This shifting between mere concreteness and individuality is never quite absent from Aristotle's thought, and it is frequently difficult to know upon which foot he is standing.

Aristotle also admits, as we shall see when we come to his logic, that the term "substance" may be applied by courtesy and secondarily to universals, when these are regarded as *individuating* one class of substances from another, and as providing the essential and distinctive properties of a given genus. And the qualities that mark out the species within the genus and the subspecies within the species have an even greater right to the title, which increases as the individual is

[18] *Met.*, VII, 6, 1031*b*, 30.

[19] *Ibid.*, 1032*a*, 5.

[20] *Cf.* Zeller, *op. cit.*, I, pp. 329 ff.; Ross, *op. cit.*, pp. 165–166; *Met.*, VII, 1, 1028*a*, 25 ff., 2–6 (1028*b*–1032*a*). Book VII is believed by Jaeger, *op. cit.*, pp. 204 ff., 209 ff., to be an independent, later treatise eventually inserted into the *Metaphysics*. Ross, however, disagrees.

more and more nearly isolated. But in its true and primary sense the word is applicable to the individual alone.[21]

This development away from Plato's doctrines, and the increasing hope of overcoming the "separations" they had introduced into the universe, were apparently attended by a change in Aristotle's views on the relations of the sciences and the nature of philosophy. Both the dialogue *On Philosophy* and certain earlier portions of the *Metaphysics*, we are told, suggest that Aristotle at first limited the field of dialectic or philosophy proper to supersensible being alone, much as Plato had done. This was tantamount to identifying metaphysics with theology, since the Platonic Ideas had been already ousted, and God alone remained as the sole form of supersensible existence. And theology could be no more than one science among others, dealing with a distinctly confined and somewhat remote field. It was only later, so the argument continues, after the doctrine of substance took on shape, and the universe was falling more and more within a single perspective, that the scope of metaphysics broadened and became all-inclusive, taking for its province the whole of a more widely conceived Reality including the sensible as well as the supersensible world.[22]

However that may be, we soon find Aristotle distinguishing philosophy from the other sciences as a study of Being as such, and contrasting its universality with their specialized investigations of single aspects of Reality. And we have seen him also reducing the primary significance of being to substance, and allowing only a secondary application of the term to such things as universals, unity and plurality, negatives, and the like. The study of these secondary applications is, he feels, to be undertaken chiefly because of the light they shed upon the central problem.[23] The "being" of accidental or incidental qualities and the "being" of truth are barred from metaphysics, in that the one is not a subject of scientific research at all, and that the other belongs to the domain of

[21] *Cf.* Zeller, *op. cit.*, I, pp. 332 ff.
[22] *Cf.* Jaeger, *op. cit.*, pp. 213 ff., 226 ff.; Ross, *op. cit.*, pp. 156–157.
[23] *Met.*, IV, 1–3 (1003*a*–1005*b*). *Cf.* VI, 1 (1025*b*–1026*a*).

psychology and logic.[24] But naturally, it is the business of metaphysics to investigate the logical principles that the special sciences accept without question, and to do this it must take under its consideration the two great fundamental axioms upon which the presuppositions of thought and science rest, the laws of self-contradiction and excluded middle. For these, after all, provide the final test of what can and what cannot *be* in any and every sense of the word. Incidentally, Aristotle defends these laws against the attacks made upon them by the Sophists, and launches a vigorous counter-offensive against the Protagorean theory of the relativity of truth, an attack which also renders untenable the identification of knowledge with sensation and the Heracleitean doctrine of the identity of opposites upon which Protagoras fell back for support.[25]

The doctrines of substance and of the scope and object of metaphysical speculation could not, however, altogether escape scandal as they grew up and played together in Aristotle's mind, and their association led to one embarrassing result which he was unable to leave on anybody else's doorstep. The universal might be dislodged from its Platonic position as the supremely *real* object, and the individual might be enthroned in its stead. But, unfortunately for Aristotle's purposes, it could not be dislodged from its equally Platonic position as the supreme and only true object of *knowledge*. To that it clung with a grim tenacity which could not be overcome. Say what you would, and Aristotle, after all, did not want or try to say anything to the contrary, the process of knowing lay in classification. Scientific investigation consisted in extracting from particulars what was common to them, and only as the individual was dissected into a set of universals—laws, types, qualities shared in common with others, and the like—could it be said to be *known*. Thus he found himself nursing the lusty and crying paradox that knowledge did not have Reality or substance for its object, since substance was individual, and the individual alone was real. But knowledge that was not knowledge of anything real was a bit off color, to say the least.

Aristotle recognized how compromising it was to be caught

[24] *Met.*, VI, 2–4 (1026*a*–1028*a*). [25] *Met.*, IV, 3–8 (1005*a*–1012*b*).

in such a position,[26] but he never succeeded in explaining matters satisfactorily. He made, to be sure, a couple of attempts that might have rendered the situation less equivocal, if only he had seen them through. He suggested dividing knowledge into two sorts, potential knowledge, which dealt with "the universal and indefinite," and actual, which, being a specific act of knowledge, must be focussed upon a definite example of the universal. For example, perception of a color in general is potential, and is incidental to the actual perception of a given instance of the color in question. Similarly a potential knowledge of the letter "alpha" in general is involved in the grammarian's actual study, here and now, of a particular "alpha" occurring in some word.[27]

Possible implications of this passage are developed in another place, where he points out that although the concrete thing is always "stated and cognized by means of the universal formula," it is also "known by the aid of intuitive reason or sensation."[28] Here he seems to be headed towards a recognition of the unavoidable and irreducible *given* element of sense that always figures in knowledge. Knowledge may be *of* universals, but it must also be *about* particulars if it is to be worthy of the name. It may be a discovery of common properties and general laws, but the universal truths it discovers must explain individual things. Thus, when I know all *about* a physical body, what I find myself really knowing is the laws of motion, inertia, gravitation, etc. But there is also present in my thought a residual, unresolved, "this here thing" aspect, which my thinking must use for a ground for taking off and for landing again from its exploratory flight. However, Aristotle never followed up these clues, and the difficulties involved in regarding the individual as the only thing that has real being and the universal as the only thing that can be known constitute one of the self-contradictions of his system.[29]

[26] *Met.*, XIII, 10, 1087*a*, 10 ff.

[27] *Ibid.*, 1087*a*, 5–25.

[28] *Met.*, VII, 10, 1036*a*, 2–10.

[29] *Cf.* Zeller, *op. cit.*, II, pp. 377 ff.; Ross, *op. cit.*, p. 171; Zeller, *op. cit.*, pp. 334 ff.

III

So far our discussion might lead us to think that Aristotle jumped to his conclusion that substance is individual and that the particular object is the only real being. This, however, is not the case. The criticism that wrecked the Platonic Ideas was accompanied by a long and careful work of reconstruction calculated to place the supreme reality of the individual upon a sound and positive base. Aristotle saw clearly how easy it was to relegate the particular object to a secondary position as a loose and accidental union of Form and Matter, and how readily in these circumstances Form and Matter might be considered primary and treated as independent realities. And his eyes were open to the facility and impressiveness of a hard and fast distinction between sensible and supersensible existence.

If, then, the tie between Form and Matter in the individual was to be made essential and indissoluble, and if the gulf between the supersensible and the sensible worlds was to be bridged, a principle of continuity was needed which would not only make each particular object a real unit, but also completely organize into a single whole all the different sorts of individuals it took to make a universe. A way of shading Form and Matter into one another must be found. They must be made convertible terms. Nay, they should, if possible, be reduced to mere differences of point of view about one and the same thing. In like manner, sensible being must be made to shade and merge into supersensible being in a series of gradations in which no break appeared. God must be not a thing sundered from the world, but rather a Form of being to which all the other Forms, displayed in the sensible order, naturally led. He must be the Limit, the Being that existed to the *n*th power, towards which the universe aspired and mounted step by step. This view, we may remember, Aristotle was already setting forth in the dialogue *On Philosophy* as an argument for the existence of a deity.

How a universe reconstructed along these lines would look may well have been plain far in advance of its completion.

The difference in kind between the sensible and the Ideal worlds, which Aristotle felt that Plato had favored, would resolve themselves into differences of degree. Supersensible being would be merely a complete attainment, sensible being an incomplete realization, of all that Being as such was good for. At the apex of such a scheme would stand the perfect individual, the individual whose nature or career developed to the fullest the best opportunities that Reality afforded. Below him would come tier after tier of particular objects that developed to a less high degree the lower capacities of Being. A general distinguishing mark of these inferior Forms of existence might also be made out. All sensible particulars were mixtures of self-fulfilment and of undeveloped possibilities that their proper natures were unable to cope with and express. They had to be absorbed and utilized by individuals of another species before they could get all their potentialities realized. Hay, for instance, could not realize within its vegetable nature the traits in its character that made it good fodder. It took browsing cattle to do that. But neither could cattle express in or among themselves their ability to become beefsteak. They could not feed upon themselves or upon one another. To realize this aspect of their nature man was necessary. In short, however perfectly a sensible object might realize its own particular Form, it was still material for some further Form. Or we might venture upon a stronger expression and say that no Form of being whatsoever, short of perfection, was pure, self-contained, and self-realized Form. It was also Matter, for it was always in part defined and justified in terms of some Form higher than itself.

In a world so remodelled Form and Matter would really turn out to be convertible and relative. It would all depend upon how you looked at a thing. Hay, to revert to our former example, might be regarded as a vegetable *Form* assumed by the soil, since it realized a capacity in the soil for growing grass. But it might equally well be regarded as vegetable *Matter* for the cattle that fed upon it, since it proved capable of nourishing them and was a means of realizing the cattle Form. But the cattle again, in terms of which the food value

of hay was expressed, had themselves a food value that it took the requirements of human nature to measure. Every sensible object then would be double-faced, would look downwards to something whose possibilities it helped realize, and upwards to something without whose presence and aid all that it was capable of could not be put into actual effect. In this unfinished aspect of every sensible object, and in the consequent necessity of seeking its complete and final explanation in something outside, beyond, and above it, the secret of its distinctively material character might lurk.

Conversely, the distinctive mark of an immaterial being might lie in the fact that it could realize within itself all its potentialities, and therefore called for nothing higher than itself to supplement and complete its activity. Thus if the fatted calf could only fatten upon itself instead of upon grass, and have for itself the value that actually, as matters stand, it takes the butcher to realize—if, in a word, it could only be beefsteak to itself—there could be no idolatry in bowing down and worshipping it as God. For hay would both feed upon and be fed upon by something outside itself; but the calf would feed upon itself alone and be fed upon by nothing outside itself. Its life would be self-sustained and self-contained, and hence would mark the highest point to which natural processes could be developed and the final goal towards which they might seem to aspire.

Now the highest thing we meet with on earth, as our universe is actually constituted, is human intelligence. The minds or souls of the stars are to be sure superior, since they, being sustained by deathless bodies, are imperishable. But the astral intelligences, as we shall soon see, were more of a liability than an asset in the Aristotelian system, and may for the moment be left out of the picture. Turning back, then, to human minds as the highest forms of being with which we are in direct contact, we find that for all their superiority they are really in the same situation as the humble hay we have just been talking about. For they need a body, senses, and the material of sensible experience to sustain them, just as hay needs soil to grow in. Not only that, but in giving a rational form to the stuff of sensible experience they are also providing matter for science and phi-

losophy to use in the quest of truth. And it is only from utilizing this intellectual matter as the search goes on, and from trying to recast the results of scientific research in the form of a contemplation of truth, that our thinking gets the highest value possible to human thought; just as hay has perhaps realized its noblest possibilities when it has taken on the form of good ribs of beef.

Human intelligence, therefore, feeding as it does upon the senses, and at the same time ever aspiring to become absorbed in some act of consummate vision, cannot be the actual apex and keystone of the world. But the form such a keystone must take on is sufficiently indicated by the converging lines of the sensible order and by the point at which their sudden truncation occurs. What we are stopping just short of, and what we need to cap the edifice, is an intelligence that can think independently of a body and of senses, and that thinks about nothing outside itself. This is the only logical culmination of an ascending series suddenly arrested at the level of human or astral intelligence, such as our universe seems to be. And sometimes, in moments of profound meditation, when we have lost consciousness of our surroundings and even of our body, and are almost thinking just for the sake of thought alone, do we not tremble upon the verge of actualizing even within our human experience this highest possibility of thought and being? So fine indeed is the line that divides the higher reaches of our mental activity from the activity of such a supreme intelligence that the one might seem merely to continue and complete the other.[30]

Meantime, Aristotle's studies in psychology, biology, and ethics were pouring in abundant evidence of a kind to encourage and confirm his view that Form and Matter are not entities in themselves existing apart from particular objects, but are rather relations in which individual substances stand to one another. Hard-headed, scientific fact gave no countenance to a metaphysical division of the particular thing into two distinct and non-convertible principles. On the contrary, it bore out the contention that what we called Form in an object, and what

[30] *Cf.* Ross, *op. cit.*, p. 153.

we called Matter, was in reality entirely a question of point of view, and that these two aspects were interchangeable and continuous. On this point Aristotle's researches into the nature of motion and change were particularly convincing, as we are about to see for ourselves.

## CHAPTER III

## FORM AND MATTER. THE ACTUAL AND THE POTENTIAL

### I

An analysis of any and every sort of change and movement reveals, says Aristotle, four factors at work.[1] No one of these four can be dispensed with. All of them must be recognized and grasped before the why and wherefore of any process can be understood. Take a simple act like the making of a statue.[2] There must exist a stuff like bronze capable of being worked and a form into which it can be worked. So much Plato saw after a fashion.[3] But besides the matter and the form there must be a sculptor's hand to do the work of forming, and an animating vision or purpose in the sculptor's mind that guides his hand as he works. In other words, there must be an exertion of force or energy, and a reason why that energy is exerted as it is. Or again, to elaborate another instance cited by Aristotle,[4] take a natural process like animal reproduction. It requires the presence of material, provided by the female,[5] to be incorporated in an embryo, of a father to set the process of incorporation going, and of a pattern of some sort for the embryo to follow and illustrate in its growth. Last but not least, there must also be inherent in that growth an aim or purpose to realize not simply "any old" pattern but the form of the animal's proper species. It is because of this purpose

[1] *Cf. Met.*, V, 2, 1013*a* 25–1014*a* 25; *Phys.*, II, 7, 198*a* 14–198*b* 5.
[2] *Met.*, V, 2, 1013*a*, 25.
[3] *Met.*, I, 6, 988*a*–7 ff.
[4] *Met.*, V, 2, 1013*a*, 30–31.
[5] According to Aristotle the female contributes only the material for the offspring. Its form comes from the male alone.

or aim that species breed true and "man generates man." [6] Otherwise in our pre-natal development we might follow the pattern of the monkey or the cockatoo, and cats might just as well give birth to dogs or to assorted litters of random types as to kittens. Or finally, let us concoct an illustration of our own. In building up a football team we must have a suitable stuff or *material*, which we find in the quickness, strength, courage, and intelligence of the players. These abilities must then be organized, or "licked into shape" as we say. In other words they must take on and realize the *form* of a team. To do this the players must bend every effort, and show themselves *efficient*. And their work and expenditure of force must not be haphazard but always controlled by a vision of the *end* after which they are striving.

The same four factors appear also in simple cases of what we to-day should call mechanical motion.[7] There must be: (1) a body to move, (2) a line or form for the motion to follow or take on, (3) a shove or push of some sort to start things off, and (4) an inclination or purpose in the body to move in a certain way.[8] This last factor of purpose is best exemplified of course in acts inspired by a conscious aim, as, for instance, when we take a walk for the sake of our health.[9] But it is unconsciously present and operative in all natural processes.[10]

These four indispensable elements are called by Aristotle the *material cause*, the *formal cause*, the *efficient cause*, and the *final cause*, respectively. Their relations naturally are capable of some refinement and complication, which, however, need not detain us.[11] Moreover, further observation shows us that, even as it is, our analysis has been overdone, and that we have in a way been hairsplitting. The material cause, to be sure, stands out for the moment quite distinct, but the three others prove to be not so independent of one another. Indeed, we might seem

[6] *Physics*, II, 7, 198*a*, 26. The translations throughout are those of the Oxford Edition of Aristotle in English.

[7] *Cf. De Caelo*, IV, 3, 311*a*, I ff.

[8] *Cf.* Ross, *op. cit.*, p. 75.

[9] *Met.*, V, 2, 1013*a*, 33.

[10] For a discussion of this point and references *cf.* Zeller, *op. cit.*, I, pp. 355 ff.; Ross, *op. cit.*, pp. 78 ff.

[11] *Cf.* Ross, *op. cit.*, p. 72.

to be dealing with three aspects of one and the same principle rather than with three separate factors. For look once more at the making of a statue. The sculptor's mind is filled at the moment with the form of the statue on which he is working, and this form constitutes the end towards which he strives. It gives content to his purpose and makes him go through the appropriate movements of chiselling or modelling. Without it there would be no motive to work, and without motive his hand would not move. Or take the football team. The form or nature of a good football team is both the end after which the players are striving and the driving power that initiates and sustains their practice.

In the same way, the formal, final, and efficient causes combine in the natural process of reproduction. It is the human Form in the father that determines the human form of the offspring. And the reproduction of that form in the offspring, or in other words, the perpetuation of the species, is the end or reason for the act of generation. The human Form, then, is formal, efficient, and final cause of the reproduction of human beings.[12] Again, in the case of plain physical movement every motion follows a given line towards a given end. This line and this end are inherent in whatever sets up the movement, and are part and parcel of its cause, just as the curve and the aim of a baseball are part of the pitcher's throw. It is the nature of fire, to use an Aristotelian example, to proceed to the circumference of the universe. It proceeds there in order to get there. Its aim and its nature make it proceed there. Once more the formal, efficient, and final causes turn out to be the same.[13]

## II

We have now taken a long step forward in unifying our world. The material cause, however, still stands apart and in apparent opposition to our new trinity-in-unity, and unless

[12] *Cf. Physics,* II, 7, 198*a*, 24 ff.

[13] *Cf. De Caelo,* IV, 4, 311*a*, 1 ff.; Ross, *op. cit.,* p. 75. For further references and a discussion of the identity of the formal, efficient, and final causes *cf.* Zeller, *op. cit.,* pp. 355 ff.

its separation can be overcome we may appear to be in some danger of reverting to Platonic dualism. But Aristotle is ready with his solution. His observation of change and motion has revealed to him not only the four causes, but another fact of immense significance, as we shall soon see, to the relations between Form and Matter. All process and becoming, movement, growth, alteration, transformation, and the like may be reduced to a least common denominator, and may be described as essentially a turning of unrealized possibilities into actual facts.

It is not difficult to make out what Aristotle is driving at. We can see for ourselves that, if things are to move or change, they must at each instant be something or somewhere they were not the instant before. If they in no respect differed from moment to moment, we could not say that they had altered or shifted. And yet, obviously it must have been *possible* a moment ago for them to be what and where they are now. Had it been impossible, they could not be in their present place or condition. Any and every example of Becoming, then, reveals two contrasted moments or states. It reveals also that these states stand to each other in the relation of the possible to the realization of that possibility in actual form, and that the passage from one to the other, or in other words the process of becoming, may be defined as Aristotle defines it, as an actualization of the potential.[14]

But English words like "realization" and "actualization" are equivocal. They have a transitive as well as an intransitive sense, and stand for the process as well as for the state of being to which the process leads and in which it ends. Aristotle's thought did not altogether escape the same ambiguity. He coins, to be sure, the word "Entelechy,"[15] perhaps best translated into English as "actuality," to designate that activity of *maintaining* Form which completes and crystallizes the motion or change involved in *attaining* it. And he also uses the term

[14] *Cf. Met.*, XI, 9, 1065*b*, 5 ff.; *Physics*, III, 1, 201*a*, 10 ff.; VIII, 1, 251*a*, 9 ff.; also Ross, *op. cit.*, pp. 83–84; Zeller, I, pp. 380 ff.; Rolfes, *Die Philosophie des Aristoteles*, pp. 85 ff.

[15] Probably derived from the Greek "to be absolute" or "complete."

"activity" as contrasted with motion to differentiate the state from the process of realization.[16] But he does not always draw the distinction too nicely.[17] Nor can he, for, after all, the equivocation exists in the process of becoming itself. Just by the fact that they are going on, change and movement express and actualize the ability to move and change. While they are in progress they are not in course of being realized, like the dénouement to which they are leading. They are already an actual fact. Motion, then, though it is a bringing to realization of all the other capacities of an object, is itself the attained realization or actual form of the object's capacity for movement as such.[18]

The discovery that all change and movement may be defined as an actualization of the potential is capped by another no less important for our purpose. Aristotle has found that the relation between the actual and the potential is identical with the relation between Form and Matter, and hence that Form and Actuality, and Matter and Potentiality are convertible terms. Here, again, there is no difficulty in following him. Indeed, if we look back over the preceding pages, we shall find that we ourselves have already slipped with perfect ease and unconsciousness into the habit of using the words interchangeably. We have done so because the *possibilities* out of which a thing arises really are the *stuff* out of which it is made; and because any *actual* state of being is also an organized, definable, *formal* condition of existence. It makes no difference whether we call hay *potentiality* or *material* for beefsteak, or a lump of bronze a *possible* statue or *stuff* for a statue. The essential relation between the two substances is equally well described by either set of terms. So too, we can talk of the grown man either as giving *form* or as giving *actuality* to what is inherent in the child, and mean the same thing. And we can refer indiscriminately to a football team as the *shape* into which the qualities of the players have been "licked," or as a *realization* of the players' capacities. Even the behavior of a body simply

16 *Cf.* Ross, *op. cit.*, pp. 81–82.
17 *Cf.* Zeller, *op. cit.*, pp. 379 ff., and notes.
18 *Cf. Physics*, III, 2, 202*b* ff.; VIII, 1, 251*a*, 9 ff.

moving in space can be treated at will as either the *fulfilment* or the *formulation* of its natural line. Here again one term may be used in the place of the other without altering the sense, and without less vividly or accurately describing the character of the relation involved.

Wherever, then, in our ensuing discussion we come upon the words Actuality and Potentiality or the equivalents, we may substitute Form and Matter. With this in mind let us see what light a further study of change and movement sheds upon the nature and relations of the Actual and the Potential. A first fruit of this study is the startling discovery that the grown-up, completed thing, or in other words, the *actual*, must be prior to the conditions that have made it possible.

For a moment such a statement makes the world look topsy-turvy. How, we indignantly ask, can we make sense or logic of the notion that mature age is prior to youth, the chick to the egg it was hatched from, the statue to the bronze of which it is made, the trajectory that a body has not yet completed to the position in which it is here and now? Surely the raw material must be on hand before the finished product, and the possibility of existing must precede actual existence! But it behooves us to go slowly and to re-examine the situation more carefully before committing ourselves. And a moment's reflection shows us that the logic of the situation is really on Aristotle's side. For how can we think of a thing's being possible without first having in mind what it is that is possible? Mere possibility, or, in other words, capacity for nothing in particular, would be capacity for becoming nothing at all, and capacity for becoming nothing at all could not even be called capacity. Indeed, it would be positive incapacity. Or, to put it the other way round, ability means ability to become something actual, and it is only because it can become this something that it can be an ability. The actual, then, must be already present in some form or other before it can be regarded as potential; or, as Aristotle puts it, the notion of the actual thing must precede and condition our knowledge or description of the possibility of that thing's occurring.[19]

[19] *Met.*, IX, 8, 1049*b*, 10 ff.; *cf.* Ross, *op. cit.*, p. 177.

Nor is there any quarrel between logic and the observed facts of change and movement. Take bronze, or the egg, or the child. It is true that so far as we regard them, not as potentialities of further development, but as forms of being realizing the capacities latent in tin and copper or in spermatozoa and ova, they come before the statue, and the chicken, and the man. But look at them in relation to the things they are to become. How can bronze be such stuff as statues are made of unless there are such things as statues to be made out of it? And how can the development of any particular lump of bronze into a particular statue take place unless the form of the completed statue is somehow present from the beginning in the productive process to instigate and direct it? Otherwise the metal might just as well become a bowl or a tripod. Or again, how could the embryo become the child, and the child the man, if, even before the child was begotten, there were not actually such a thing as the human species, and if that species did not in some way preside over the process of reproduction, guiding the growth of the organism and making it even at the moment of conception a possible man rather than a possible dog or bird. Or take the movement of an inorganic body. It could not follow its particular line unless the form and nature of its movement were actually operating in it, to make it move as it does.

In fact, then, as in logic it is the Form of the completed thing that determines beforehand what is fit raw material for the thing. And it is the nature of the finished product that inspires and controls the process of converting the raw material into the Form in question. Becoming and change and movement bear their witness to the priority of the actual.[20] And as Actuality is characteristic of completeness in a substance, and is the goal or reason for its existence and for its growth and particular nature, the actual may be said to be prior not only logically but "substantially" to the potential.[21]

The way in which Actuality evinces its priority and determines and develops Potentiality is most clearly seen in the production of artificial objects. The Form of the finished product is in the maker's mind from the beginning, selects through him

[20] *Met.*, IX, 8, 1049*b*, 17 ff., 1051*a*, 3. [21] *Ibid.*, 1050*a*, 3 ff.

the stuff suitable for its embodiment, projects itself into the metal or brick or wood, as the case may be, and thereby creates the possibilities of the material. And these possibilities the Form realizes by working through the conscious aim and purpose of the artist. In natural processes the situation, though more obscure, is the same. For according to Aristotle all such processes have a dénouement or culmination towards which they are attracted, and for the sake of producing which they take place. But, whereas in a process guided by art the culmination is foreseen, and the Form in the artist's mind selects and works up its material from without, in Nature the Form is imminent in the process itself, and is realized unconsciously though none the less purposively.[22] Aristotle gives as an especially clear example of what he means the case of "a doctor doctoring himself."[23]

A final proof of the priority of the actual to the potential is offered by the consideration that the more completely realized a thing is, the less capacity it will have for further change and transition. A completely realized and finished thing would be beyond any possibility whatsoever of transformation and movement. Nothing more could be made of it, and it would have nowhere else to go in quest of greater perfection. It could then be properly described as pure Actuality or Form wholly free from Matter. Such an object, being exempt from change of place or quality, could not grow old or pass away, but would be everlasting and eternally itself. This condition, Aristotle feels, is almost, though not quite, realized by the heavenly bodies. They have no capacity for transformation and hence are changeless and imperishable. They have only a capacity for "whence" and "whither," which actualizes itself by perpetual revolution in space. This, incidentally, is a proof of the uncreated and indestructible character of the universe.[24] It also demonstrates the priority of the actual, since the fewer potentialities a thing has and the nearer it approximates to a

[22] *Physics,* II, 8, 199*b,* 25 ff.

[23] *Ibid.,* 30–31. For a discussion of Aristotle's theory that the operations of Nature are unconscious art, and for further reference *cf.* Zeller, *op. cit.,* I, pp. 418, 464; Rolfes, *op. cit.,* pp. 78 ff.

[24] *Met.,* IX, 8, 1050*b,* 20 ff.

pure Actuality, the higher and better and more important it is.

In passing, Aristotle seizes the opportunity to have another dig at Plato and to reassert the individual nature of all actual substance. The Forms as Plato conceives them are, he tells us, mere possibilities of being which become actual only in so far as they are enacted in individual shape.[25] The Idea of movement, for example, is not itself a motion. Its existence shows merely that motion is possible. But if motion is to exist, there must be something more mobile, more actually moving than the Idea of motion. This will be the particular movement which gives actual expression to the Idea. It is in the particular motion, then, not in the Idea of motion, that actuality and real being are to be found.[26]

We shall have occasion presently to note the importance in the Aristotelian system of the priority of the actual to the potential, or in other words of Form to Matter. But for a moment we are engrossed with an even more significant fact. Our discovery that all change and movement can be formulated as an actualizing of potentiality has also shown us at last how to overcome the Platonic separation of the final-formal-efficient cause from the material cause. For the formula can be successfully applied only if Actuality and Potentiality are regarded, not as ultimate metaphysical entities, but as merely two different ways of looking at one and the same substance. In other words, if change is really to take place, Form and Matter must be relative, not absolute.

Take once more our old familiar bronze. It is an alloy of tin and copper. As such it actualizes and gives explicit form to capacities in those elements for being amalgamated into a metal which, in its turn, is possessed of certain new qualities, among them fitness for being made into a statue. It will be noted, however, that neither tin nor copper by itself is suitable stuff for the artist's purpose. Neither of them therefore in itself can be called the potentiality of a statue. To be called that they must first assume the *form* of bronze. That is, it requires *actual* bronze, not the possibilities of bronze, to make the

[25] *Met.*, IX, 8, 1050*b*, 35 ff. [26] *Ibid.*, 35 ff.

statue possible. The very metal, then, that is *actually* bronze because it has realized the potentialities latent in tin and copper, is just by virtue of having realized those capacities itself a *potential* statue.

Or again, take a carnivorous animal. Like all live things it draws its nourishment from the earth, but it cannot do so directly. It cannot eat dirt. Nor for that matter can it eat and digest the realization in vegetable form of the earth's capacity for supporting life. A tiger would not last long on grass. On the other hand, dirt does possess a food value for vegetable life, and is potential grass, and vegetable life does have a food value for, and is potentially the herbivorous animals upon which the tiger can feed. It is all rather like The House That Jack Built. Not only must the potentialities in the soil be actualized in vegetable form, but the potentialities afforded by the vegetable form (which are not to be found in the soil as such) must be actualized in animal form, before the tiger finds the potentialities (non-existent in the vegetables as such) that its carnivorous nature can assimilate and transform.[27]

The sum and substance of all this is that we must not think of change as a process in which a single homogeneous stuff or potentiality passes from Form to Form, preserving meantime essential characteristics of its own, as water may be poured from cup to cup and yet remain the same. The temptation, however, to take this view that all potentiality is homogeneous is very great. In the first place, qualities or Forms plainly cannot become one another. The *sort* of thing an object is at one moment does not change into the *sort* of thing it is at the next, when the object itself changes from one sort to the other.[28] When the leaves turn in autumn, for example, there is a passage from green to brown. But it is not green that turns brown. It is the leaf. The color green has not ceased to exist as a color simply because something has ceased to be green. In the same way, in making a statue out of bronze the sculptor does not turn what characterizes bronze as such into what characterizes a statue as such. He merely turns something that possesses the one character into something that possesses the other.

[27] *Cf. Met.*, IX, 8, 1048*b*, 35 ff. [28] *Met.*, XII, 1, 1019*b*, 3 ff.

Indeed, if change were *of* very Form into very Form instead of being simply *from* Form to Form, the whole universe would hoist itself all at once from rung to rung of the ladder of existence, and would kick away each rung successively from beneath its feet. It seems impossible, then, not to assume a substratum or material of some sort that does the changing and assumes first one Form and then another.[29]

Moreover, every sensible substance may become a number of different things. The bronze is a potential tripod, or mirror, or door, as well as a potential statue. The leaf may turn yellow or red instead of brown, after being green. Here, again, we would seem forced to assume in the bronze or in the leaf some sort of stuff that is as capable of becoming a tripod as a statue, or of turning red as easily as it does brown. And if we carry the idea to its logical conclusion we cannot escape arriving at the notion of a single, undifferentiated Potentiality or Matter underlying the basic *actual* material elements, and lending itself with equal complacence to any and every Form whatsoever.[30]

But inevitably as we seem forced to such a conclusion, it proves quite untenable when we reach it. In the first place, how can such a Matter be conceived as *existing?* All existence must be determinate, must have Form, whereas Matter by definition is formless.[31] Furthermore, a potentiality or stuff of this sort, or rather of no sort, cannot even be conceived, since it is the absolute zero of all that makes thought and knowledge possible. At the best, we can have of it only the "bastard" or illegitimate concept—the self-contradictory sense of something remaining after you know everything has been taken away—in which Plato had to seek refuge when he tried to set forth his theory of Matter as absolutely empty space. Certainly, then, it would have been absurd for Aristotle to talk of Matter as a self-identical, uniform and homogeneous principle underlying all Forms, when he had himself spoken of it as absolutely without form or genus, and had implied that it lacked any

[29] *Met.*, XII, 1, 1019*b*, 3 ff.

[30] For Aristotle's doctrine of "prime matter" and references *cf.* Zeller, *op. cit.*, I, pp. 349–350; Ross, *op. cit.*, p. 73.

[31] *Cf.* Ross, *op. cit.*, p. 66.

one Form of its own to preserve or any thread of self-identity on which different Forms might be strung.

It is not to be wondered in these circumstances that Aristotle pays little attention to "prime matter."[32] Being a "bastard concept" and the offspring of intellectual impotence, its presence put the mind to shame and was a reproach to any self-respecting system. The less said about it the better. The only Potentiality that could be recognized as legitimate, the only Matter that really "mattered," was the potential, material *relation* that we found in every sensible object. All things were potentially something else, and material for something else. But this relation had a different base and a different starting point in different objects. It did not require or point to the existence of a single stuff underlying them all. "Different things," we are told, "have different matter . . . different things come from different things," and the things from which they come are the matters of which they are made and the potentialities that render them possible.[33] Although the Form, or nature, of bronze cannot become the Form, or nature, of the statue, it is nevertheless real *bronze*, and not merely the underlying tin and copper, that is the substratum of the change from one to the other and the stuff of which the statue is made. Although greenness does not become brownness when the leaf turns, the substratum that gives up being green and takes on being brown is not something in itself neither green nor brown, indifferently putting off one color and putting on another. It is the actual green leaf. In short, the substratum of any change is always an *actual* object, an individual realization of potentiality, regarded under its twin aspect of potentiality for further realization. It is the *whole* object, the compound of Form and Matter, and not its Matter alone, that is the stuff that becomes something else. Since, then, it is always Matter *in and with a specific Form* that is the timber out of which the next stage is built, there will be as many substrata, as many potentialities, as many raw materials, as there are varieties of finished products and actual states of being.

At this point we should expect Aristotle to go still further

[32] *Cf.* Ross, *op. cit.*, p. 168.

[33] *Met.*, XII, 2, 1069*b*, 24 ff.

and maintain that there are as many substrata and potentialities as there are individual things. Each particular object, it might seem, in actualizing potentiality realizes not only the Form of the species to which it belongs but an individual nature or Form of its own. There ought to be a Form of John Smith and a Form of Tom Brown as well as a Form of Man. And each blade of grass, even, has a distinctive nature. Indeed, every individual object may be conceived as having a little, absolutely private species of its own, which it shares with nothing else, and of which it is the only example. In other words, in the Aristotelian system we might expect Form to be the principle of individuation.

But there is also another way of looking at the subject, to which, on the whole, Aristotle seems more inclined. All individuals of a given species may also be regarded as merely different and not wholly successful attempts on the part of Nature to enact the Form of the species in question. You and I, for example, and that which makes you different from me, are only incidental by-products of Nature's main business, which is to dramatize perfectly the Form of man. If that be true, our separate individualities are at the best accidental rather than essential to her processes. But even such an interpretation is too optimistic. We cannot long avoid the suspicion that our separate individualities are really signs of Nature's weakness, rather than unimportant by-products of her strength. For each of us actualizes human traits and virtues that the other fails to attain, and hence our individual characters are more a mark of unrealized than of realized possibilities.

Our apparent possession, then, of so-called individual Forms means really that each one of us lacks in some respect the Human Form in its entirety. It is a sign, not of our having attained a more complete and distinct actualization than the general Human Form can bestow upon us, but of our still being capable of further formulation along general human lines. If Nature were so constructed that she could completely realize the Form of Man in a single instance, a single instance would suffice for the enactment of the Form. There would be only one individual man in existence, and he would be a perfect and

exhaustive embodiment of all that goes to make up human nature.

If we look at things from this angle, which seems to be Aristotle's angle of approach, the principle of individuation will appear to be bound up with Potentiality rather than with Actuality. The universe, we shall say, contains more raw material suitable for finishing in a certain way, more possibilities of becoming a given Form, than any single finite existence can exhaust. And it will be this superabundance of Matter and Potentiality, rather an infinity of individual Forms, that gives rise to the multitude of particular objects of all sorts and makes literal "hash," in more ways than one, of the sensible world. Form will be responsible only for the plurality and diversity of types embodied in the structure of the universe. For the existence of many different instances of all types save God—and even with God Aristotle was to have his difficulties—we must look to Matter.[34]

Still, when all is said and done, the point is by no means clear and has always been a bone of contention among scholars. And the status to be assigned to Forms of individuals, and the question of the relations of such Forms to universals and to Matter have raised difficult and much discussed philosophic problems.

To return, however, to the question of Form and Matter in general. Had Aristotle been an American, he might have given a final illustration of his meaning, and at the same time have driven home what he conceived to be the main difference between himself and Plato, by drawing an example from a simple substance of universal appeal and consumption like ice-cream. Ice-cream, he might have said, can be served frozen in many different shapes. It can come to the table moulded like a fish, a rabbit, a sheaf of wheat, a bunch of grapes, or what not. These shapes are the impress of external forms made of some rigid, changeless, alien substance like tin. And by being impressed upon ice-cream, they do not in any way affect the nature of the stuff itself. Ice-cream has the same recipé and is just as digestible and just as nutritious when it is shaped like a rabbit as when it

[34] For a discussion of the Aristotelian principle of individuation *cf.* Ross, *op. cit.*, p. 170; Zeller, *op. cit.*, pp. 369 ff.

is shaped like a bunch of grapes. Nor are its intrinsic qualities or its recipe in any way altered if we dish it out of a wheat-shaped into a fish-shaped mould. It is one and the same ice-cream in whatever form it is served.

The Platonic universe, he might have continued, seemed to him to be something of this sort. In it all changing, sensible objects had one and the same substratum. And their apparent change came from this substratum imitating or participating in first one Form or Idea and then in another. But these Forms were separate from the substratum, were made of a different substance from it, and were impressed upon it from without. And their impression in no wise altered the nature of the substratum as such.

This, however, was tantamount to denying that qualitative change really took place, and that the potential could really *become* actual. For if, when such change and becoming seemed to occur, all that really took place was a new actualization of the same old potentiality, or the passage from one Form to another of the same old material, then obviously the potential as such did not really *turn into* the actual, nor was one substance really *transformed* into another. One and the same stuff merely took on one shape and then another, had first a potential *appearance* and then an actual *appearance*. But these shapes or appearances were wholly superficial, since the nature of what changed was not itself changed by the alterations it seemed to undergo, but remained identical throughout them all. Change, then, would be change of external semblance, not of intrinsic and essential quality or nature.

But now let us look at our ice-cream in another light. Let us assume that the different forms in which it comes to the table are not impressed upon it from without by external tin moulds, but are shaped in it from within by crystallizations essential to the process of freezing. Let us assume, furthermore, that the particular form in which it is served really does affect its recipé, its nutritiousness, and its digestibility, or, in other words, its capacity for being transformed into human flesh and blood. Suppose that in the shape of a fish it proves better food than when crystallized in rabbit form. Suppose

even that served as a bunch of grapes it is highly poisonous, whereas in the form of a sheaf of wheat it is greedily assimilated by the most delicate digestion. In that case, the shape in which it appears will make it a completely different thing so far as the digesting stomach is concerned. And the change from the crystallization represented by one Form to that represented by another will effect *essential* alterations in its substance, so essential in fact that to talk any longer of the different forms as forms of the *same* ice-cream, or to speak of its successive crystallizations in different shapes as a passage of the *same* ice-cream from one shape to another, will be sheer mockery. Indeed, it will now be the "one and the same ice-cream" aspect of the stuff, not the rabbit or the bunch of grapes, that is the non-essential and superficial aspect of ice-cream as such.

This second set of meditations upon ice-cream, Aristotle might have felt, adequately exemplified the corrections he was trying to apply to the Platonic theory. His Forms were no less fixed and unchanging than Plato's, since, after all, the rabbit-Form, the fish-Form, the bronze-Form, or the human Form, whether they were external moulds or internal structures, were what they were and nothing else, in all times and places and to all eternity. But the Aristotelian Forms had no separate existence apart from the world-process, as the Platonic Ideas had. They were not made of a different substance from the things that embodied them. They were not tin gods. On the contrary, they were successive crystallizations of the world-process, expressive of its proper nature, not of a nature outside it. Moreover, they were so deeply immanent in it that they clove to its very bottom and made even the substratum of the process multiple. They left no single homogeneous stuff to underlie them. Each Form connoted a different substratum and a distinct Matter.

Regarded in their dynamic aspect, as potentiality to be actualized and actualization of potentiality, Matter and Form evinced the same unity. A thing's Form was part and parcel of its capacity for digesting or for being digested by something else. The character a thing possessed carried with it a power to undergo certain changes. But this power was limited

and definite, and differed in objects of different kinds. Bronze could not become a monkey. A lamb could not feed upon and assimilate a lamb. Though straw was good material for bedding horses, it was poor fodder for them. And search as we might, we could never discover anything—unless it was prime Matter, which was undiscoverable—that had the power of becoming everything.

There was, then, no such thing as a general reservoir of Potentiality underlying and separate from all Forms. Nor were the actualizations involved in change mere surface ripplings of a principle whose depths no process of becoming could touch or stir. On the contrary each Form connoted a distinct and separate possibility of becoming. Any given actualization of the potential meant also the creation of a new potentiality. Change from Form to Form denoted an equally real change from the definite and limited possibility of becoming one thing to the definite and limited possibility of becoming another. It was a change from Matter to Matter as well as from Form to Form. In all change, alteration, motion, and becoming there was an actual transmutation of one stuff or substratum into another, as well as a substitution of one Form for another, when the surface transition from Form to Form, visible to the naked eye, took place.

The conclusion was clear. The testimony of the dynamic aspect of Form and Matter corroborated the evidence drawn from their static relations. From every point of view it was the "one and the same matter" aspect of Matter that turned out to be superficial and non-essential. That aspect, to be sure, caught the eye and looked plausible. But it would not stand up under analysis. And when it was disintegrated by reason, its dissolution went far deeper than any Atomistic division of matter into a multitude of qualitatively similar particles could go. Qualitative similarity was destroyed as well. Matter was as varied as Form.

It was a pity, of course, so far as the advance of science was concerned, that Aristotle upheld the supreme reality of qualitative transformation and resisted the efforts of Leucippus and Democritus and their disciples to explain all difference and

change of quality in terms of simple change of position and different geometrical arrangement of homogeneous atoms. The point of view developed by the Atomists proved infinitely fruitful and became an indispensable stepping-stone in the progress of physics and chemistry. But its adoption and its fruition were delayed for nearly eighteen hundred years, thanks largely to the authority of Aristotle's opposition, coupled with that of his devotion to final causes as scientific explanations.

But Aristotle's objections were too stubborn and deep-rooted to be overcome. The relations between the actual and the potential had absolutely committed him to the thoroughgoing reality of qualitative change.[35] Moreover, the Atomistic position was undermined, in his opinion, by the impossibility of dividing matter into *indivisible* particles like the atoms posited by Leucippus and Democritus. And again, apart from this difficulty, he felt that the Atomists took movement in space too much for granted, and failed to give a satisfactory explanation of its real nature and causes.[36] That change of place was indeed a least common denominator for other kinds of change and was inextricably bound up with them, he had no desire to deny. Change of bulk obviously involved spatial movement, and the shifting of superficial and non-essential sensible qualities in a body meant an alteration of spatial relations. Even the profound alterations involved in coming to be what one was and in passing out of being were attended and conditioned by locomotion. So far, Aristotle saw eye to eye with the Atomists. But had he not also shown to his own satisfaction that change of place, like all other change, was at heart an actualizing of the potential, and that its true cause was to be found in the purpose it subserved and the end at which it was aimed, rather than in any mechanical shove given by antecedent events? This definition, with all it upheld, stood firm, and the supreme reality of qualitative change remained a fact.[37]

[35] For an exposition and discussion of Aristotle on the reality of qualitative change, *cf.* Zeller, *op. cit.*, I, pp. 450–458.

[36] For Aristotle's objections to Atomism and the mechanistic theory of his time, *cf. Met.*, I, 4, 985*b*, 4 ff., 7, 988*b*, 20–999*b*, 30; XII, 1071*b*, 31 ff.; also Zeller, *op. cit.*, I, pp. 307, 445 ff.

[37] *Cf.* Ross, *op. cit.*, p. 83; Zeller, *op. cit.*, I, pp. 422 ff.

There is one point which, although it must have been sufficiently borne in on us by this time, may be given an extra accent in order to dispel any lingering difficulties. Aristotle obviously does not mean by *Matter* what we mean by the term. He uses it in a far wider and more profound sense. To us the first connotation of the word is physical. Matter, we say, is essentially corporeal. But to grasp what Aristotle has in mind we must rid the term completely of all physical associations. Matter, in the Aristotelian sense, is not the extended, solid stuff that strikes the senses at every turn. Nor is it the more refined material that the physicist touches in his laboratory with his instruments and envisages with diagrams and formulae. Certain kinds of Aristotelian Matter are indeed extended and corporeal, but physical qualities do not exhaust *material* character as such and are not essential to it. That character will be found in anything that is good *timber* (the original meaning of the Greek for "matter") for something else, whether that timber be what we should call physical, or mental, or moral, or spiritual. All is grist, be it a body, a sensation, a thought, a disposition, a virtue, or a beauty, that in the mill of becoming can be ground into some further form.

For example, if our hypothetical calf that was beefsteak to itself existed, it would be absolutely *immaterial* in Aristotle's eyes. For it would realize all the possibilities of its nature within itself, and would need neither grass from below nor butcher from above to support or justify its self-sustained, self-contained activity of being beefsteak. It would be beefsteak to itself and to nothing else, and hence would be matter for nothing else, and at the same time a thing for which nothing else was matter. It would then fulfil the definition of pure Form without Matter. And yet, to be slightly inexact for the purpose of driving the point home, this calf might frisk and frolic, though not feed, in any pasture, and might butt with a good thousand pounds of all too solid flesh anyone who scoffed at its immateriality on the ground that pure Form must be a spirit.

We have of course overstepped the bounds of the illustration. A butting calf would not impart motion, unmoved itself, as pure Form must do. And even frisking and frolicking would betray

a capacity for "whence and whither," and a streak of unrealized potentiality, that would degrade it to the level of the stars. To be pure Actuality, our calf would have to stand stock-still, placidly ruminating upon its own perfection. Moreover, in the world of hard fact and not of fancy, every Form of *physical* being has, just by virtue of its corporeal qualities, to actualize and live on possibilities provided by other Forms. And it must also provide potentialities that it cannot actualize itself, the full value of which it takes another Form to realize. Everything physical "matters" in the eyes of something else. All corporeal entities have, then, for Aristotle, Matter in his as well as in our sense of the word, and all physical body is metaphysical Matter as well.

Still, joking aside, the illustration may serve to adorn a tale, and probably to point half a moral. In any case, the other half can be pointed in a way to which Aristotle could take no exception. Courage, good judgment, quickness of thought, and the like are what we should call immaterial and spiritual. And yet for Aristotle they would be timber, stuff, and matter for a football team. Or again, in Aristotle's scheme, not only is the soul the actualization of the possibilities provided by a living body, but within the soul itself the psychic function or quality of life is potentiality, or, in other words, matter, for the psychic activity of sensation.[38] And the mental images provided by sensation, which we should call immaterial, would seem in their turn to constitute a potentiality or material utilized by the lower processes of thinking about things and puzzling towards conclusions.[39] Finally, even within human reason itself, there is potentiality, and hence matter in the Aristotelian sense, in the shape of a passive as contrasted with an active element.[40]

We may have laid needless emphasis upon the point. After all, we too are in the habit of using the word "matter" in the Aristotelian sense, as when we call human emotions, passions, and ideals good material for a novelist, or when we talk of a

[38] *Cf. De Anima,* II, 2, 414*b,* 1128 ff.

[39] *Cf. De Anima,* III, 2, 427*b,* 11, 14–16; 7, 431*a,* 16, 431*b,* 12, 431*a,* 16, 432*a,* 7–14; Ross, *op. cit.,* pp. 148, 153.

[40] *Cf.* Ross, *op. cit.,* pp. 178 ff.

man's being good "stuff" for the Presidency. If only we will remember that this sense, which has become derivative for us, was primary for Aristotle, and will let it come first to our minds and remain uppermost there while we are dealing with him, we shall avoid much confusion.

## CHAPTER IV

## THE ARISTOTELIAN PHYSICS

The irreducible remnant of Potentiality that lurks in all physical bodies as such, and hence the link between physical matter and Aristotelian Matter would seem to lie in the spatial aspect of everything corporeal. For example, the heavenly bodies, as we may recall, are exempt from alternation and qualitative change. They never came into being, never will pass out of it, and are world without end the same. Within them there is nothing "going on," no passage from Form to Form, no process of actualizing potentiality. But they are not pure Form and not wholly immaterial because they still possess potentiality in the shape of a capacity for "whence and whither." This capacity is due to the fact that they have "position" or "place." For several different bodies can be conceived as successively occupying the same place,[1] and hence anything that has "position" is conceivably removable from that position, or in other words is possessed of a capacity for movement. To be actually in any one place, then, means to be potentially in some other.

But what is the "place" a body occupies? It is defined neither by the shape of the body nor by its physical matter, for it is separable from the body and does not move with it. Moreover it seems to *contain* things and hence to be larger than the things it contains. A body is said to be *in* this or that place. But *where* a body is is not therefore to be delimited by the interval that separates it from the remaining bodies. This interval may vary, but the position of the body does not vary with it. At the same time, place is a relative thing. Aristotle is not concerned with an absolute space supporting an absolute set of fixed positions.[2] And his final solution of the problem is

1 *Phys.*, IV, I, 208*b*, 1 ff.

2 *Cf.* Ross, pp. 86–87.

that *where* a body is is defined by the inside of the envelope of bodies containing it. Its place is the hole in the doughnut of the surrounding world. But what constitutes the inside of the envelope and bounds the hole in the doughnut must be determined by the nearest *stationary* surroundings. The whereabouts, for instance, of a boat afloat on a river is not fixed by reference to the moving current, but by reference to the banks of the stream.[3]

Since a place must have surroundings, the universe as a whole has no place. Although it is a globe, its spherical body cannot be conceived as contained or afloat in anything outside itself. A ball of space existing nowhere and with nothing surrounding it is a puzzling idea, but it is really no more baffling than our popular notion of space as something that stretches away to infinity in every direction. And it is interesting to see that the Aristotelian view has been revived, with many new trimmings of course, by some adherents of that last word of modern science, the theory of relativity.

Furthermore, says Aristotle, there can be no such thing as *empty* space, or in other words a space existing in and for itself apart from the bodies occupying it. To prove this he leaves no stone unturned, doubtless because of the popularity at the time of the concept of the Void, sponsored by Leucippus and Democritus. His argument is too long for us to follow in detail, but we may note certain of its more familiar features. Thus, he contends, there is nothing to the Atomists' contention that a body cannot move without empty space to move in, since bodies can shift their positions and crowd one another out of their places without leaving any space unoccupied in so doing. Moreover, if bodies did move in a void, their movements, encountering no resistance, should be, he thinks, instantaneous and occupy no time, and the velocities of all bodies, great and small, should be equal. Again, body is really extended in itself, and its extension needs no second extension outside the first in which to stretch out. To be sure, the capacity of the same body to contract and expand and to become denser and rarer might seem an argument to the contrary. But this is not so,

[3] *Cf. Phys.*, IV, 1–4; Ross, *op. cit.*, pp. 85–87; Zeller, *op. cit.*, I, p. 432.

since it is just as much part of the potential character of Matter to be able to become a larger or a smaller thing as it is to be able to become one thing rather than another. And for this increase or decrease in size or density its own extension is sufficient. Finally, the concept of the Void is riddled with the same difficulties as beset that of the Infinite.[4]

An infinite spatial magnitude or body is, Aristotle feels, impossible of conception. In the first place, it is impossible to think of a body without a boundary, or of the universe except as a completed, and therefore finite, whole. Again, anything infinite could not be located anywhere, or display any spatial relations like up and down, right and left, centre and circumference, and the like, or move in any direction. Furthermore, if an infinite body were compound, at least one of its constituents would have to be infinite, since the infinite could not be composed of the finite alone. But any element which existed along with and beside others could not be infinite. Then, too, no matter how compound it was, or with how many elements or parts you started, you would find that you could always add these factors together and achieve a definite number as a result. The sum total, that is, of no matter how many parts would always be finite. On the other hand, one infinite simple element or body at the base of all things would be unthinkable, because its absolute simplicity could never give rise to variety of any sort. Moreover, observation shows that as a matter of fact many elements exist.[5]

From another point of view, however, there is a germ of infinity with which all spatial magnitudes are infected, although the disease must always remain latent and can never fully develop. Start *dividing* the parts of a spatial magnitude and the case is altogether different from that of addition. For you will then find that you can never reach any sum total. There is no end to the parts into which a body may be broken up. It is always possible to go on *ad infinitum.* In this respect, then,

[4] *Cf. Phys.,* IV, 6–9, 213*a,* 10–217*b,* 25; Ross, *op. cit.,* pp. 87–89; Zeller, *op. cit.,* p. 432.

[5] *Cf. Phys.,* III, 5, 204*a,* 8, 206*a,* 8; *De Caelo,* I, 5, 271*b,* 26 ff; Ross, *op. cit.,* pp. 83–85; Zeller, *op. cit.,* I, pp. 427 ff.

spatial magnitudes suffer from a suppressed or potential infinity, which can never become actual and be wholly expressed. To sum up, spatial magnitudes are finite, both potentially and actually, with respect to addition, and infinite potentially but not actually with respect to division.[6]

From a consideration of the spatial aspect of the world we pass almost instinctively to an inquiry into the nature of time, which shares the same Procrustean bed of "long" and "short," "big" and "little," "before" and "after," "near" and "distant," and is of much the same size and disposition as its fellow. What, then, is the common necessity which has thrown them together, and what is the link between them? The answer is, Motion. Just as there can be no space that is not occupied by bodies, and no movement that is not motion of bodies from place to place, so there can be no time that is not occupied by events and in which movement is not going on. For when we lose consciousness of change and motion, as in sleep, we lose consciousness of time also. Moreover, it is change that makes one moment different and distinguishable from another, and thus enables us to talk of time passing and of one event following another. Conversely, there can be no perception of movement into which time is not interwoven.

But although they are inseparable, time and motion must not be identified. They differ in important respects. Movement and change inhere in particular bodies, take place where those bodies are, and may differ in velocity, whereas time is not localized and uneven, but is everywhere and in all things, and never varies its pace.

To explain this mysterious play of Box and Cox, we must return for a moment to space. Motion, as we have already seen, involves change of place. Space, however, is continuous, and hence in passing from one point to another a body must traverse all the intervening points. This means that any position from which a body departs may be always described as just *behind* or *aft* of the position at which it next arrives, and that its new position is just *in front* or *forward* of its old. Move-

[6] *Phys.*, III, 6, 206*a*, 7–207*b*, 20. *Cf.* Ross, *op. cit.*, pp. 84–85; Zeller, *op. cit.*, I, pp. 427 ff.

ment, that is, reveals a relation of *fore* and *aft* between adjacent points in space. Without this sense of fore and aft there could be no awareness of movement.

But now, when motion shows that adjacent points in space are *behind* or *forward* of one another, it does so by introducing a new, non-spatial element into their relations. It makes the point left behind an *old* point, the forward point a *new* point. It turns our *fore* into a *before* and our *aft* into an *after*. All the positions in front of a moving body necessarily belong to that body's future. Otherwise, they could not be described as in front of it. And all the positions behind it are also in the *past*, for otherwise they could not be called even spatially behind. Motion, then, takes *time* to take place. *Now*, we say, a thing is *here*, now it is here, now it is here, matching our succession of spatial points with temporal instants. But when we do this, we are simply counting out the positions the moving body occupies—"one," "two," "three." The instant of time is merely the beat of the count as the motion goes from aft to fore and turns fore into aft. If, however, we compare two moving bodies, we find that the number of "nows" sufficient to count the movement of one body is often either too great or too small to match a similar movement of the other. In that case, we say that one of the bodies is moving slower or faster than the other, or that one movement is greater or less than another in point of velocity.

But the shading of one "now" into another does not vary. That by which we measure velocity is not itself now longer, now shorter. It is not time but what goes on in time that moves slower or faster. Again, time like spatial magnitude cannot be divided into ultimate, separate units. Like space it is continuous, not discrete. But unlike space it is not finite with respect to addition. No finite sum of the instants that have passed, or of those that are to come, can ever be computed. Time is everlasting, without beginning or end. Furthermore, in a sense the instants of time are identical. The content, to be sure, is always different. Each new beat accents a shift of scene. But each new content is "now," and that sense of "now" is continuously and without interruption present to the mind.

The "now," we might almost say, is the persistent screen on which the succession of events appears.

Plainly, however, we could not count "now," "now," "now," "one," "two," "three," as the moving picture varies on the screen, or compare the movements of its component parts, were it not for number. For it is by number that we measure the more and the less, the faster and the slower, the different amounts of space covered in the same time, and the different amounts of time it may take to cover the same space. Time, then, we may say with Aristotle, is *the measure or "number of motion in respect of 'before' and 'after.'"*[7]

Nevertheless, time is no more to be identified with number than it is with movement. It is rather an application of number to movement. It is rooted in what is counted, not in the mathematical entities that we use in counting. This application of mathematics to motion is obviously made by the mind, so it becomes an interesting question whether time would exist in the absence of a mind to do the counting. Motion from spatial *aft* to *fore*, Aristotle seems to think, might go on, but in the absence of mind it could not acquire the significance of *before* and *after*.[8]

We turn now to consider the different kinds of locomotion, and to ask what is their ultimate cause. All change of place, as we have seen, conforms to the definition of change in general as an actualization of the potential and the realization of an end. And we have already noted that movement in space is involved in such different mobile aspects of the universe as change of quantity and shift of surface quality, and is associated even with alteration of essential form. One other general characteristic of locomotion may be touched on at this point. Change of place is the only kind of change that can be conceived as unbroken and everlasting. For space is continuous, and in it a trajectory may return upon and repeat itself, whereas the transition from Form to Form involved in qualitative change has a *terminus ab quo* and a *terminus ad quem*. Even then it is

[7] *Phys.*, IV, 11, 219*b*, 1; 320*a*, 25. The italics are mine.

[8] For Aristotle on Time *cf. Phys.* IV, 11–14, 218*b*, 20, 224*a*, 15; Ross, *op. cit.*, pp. 89–91; Zeller, *op. cit.*, p. 433.

not a through process, but a way train stopping all along the line at each new actualization, and starting again from the new potentiality each new actualization affords.

Locomotion, however, is itself not simple but complex, and is not always continuous. There are three kinds of spatial movement; movement in a straight line, movement in a circle, and movement resulting from a combination of the two. Rectilinear movement is natural to the four elements, earth, water, air and fire, of which all things terrestrial are composed, and is expressive of their innate tendency to return to their proper places in the universe. It is the nature of earth and water to proceed towards the centre of the world, of air and fire to proceed towards the circumference.[9] Upon these opposed tendencies our distinctions of up and down, high and low, light and heavy, rising and sinking, are founded. Were the elements able to carry out their native impulses, free themselves from one another, and return altogether to their proper spheres, their rectilinear motions would cease and the distinctions founded on such movement would disappear.[10] We shall see in a moment what interferes with their natural tendencies and keeps them in a state of turmoil.

Clearly, since the world is not infinite, every rectilinear movement and every motion in which rectilinear movement is admixed must have a starting point and an end. It cannot therefore be continuous. Clearly, too, no motion of this sort starts or stops of itself. It is pushed or pulled into being by some other movement and is sooner or later arrested by counteraction. Hence it is neither self-initiating nor self-perpetuating. Nor can we find any first, unpushed push to set the series going, however far back we go.

Movement in a circle, which occurs only accidentally on earth, is native to the heavenly bodies. Aristotle, we may remember,[11] seems to have thought at first that this motion was due to the free activity of the star-gods, but to have eventually concluded that it was the natural movement of the aether of which the celestial spheres were composed, just as rectilinear

9 *De Caelo,* IV, 2–3.

10 *Cf.* Taylor, *op. cit.,* p. 61.

11 *Cf. supra* p. 35.

motion was indigenous to the other four elements.[12] In rotation we have at last the only form of change that can be conceived as regular, self-perpetuating, and everlasting. Its direction and rate are uniform if it is left to itself. It involves no displacement of its centre, and hence in one sense not even any change of place. Again at whatever point you may choose to regard one cycle as completed, you will find that another has been begun, so that there is no reason why rotation should ever stop. All in all, then, being purged from every possibility of changing quality and of slowing down or halting, rotation is the perfect movement. It is the movement that unites ceaseless motion with unbroken repose in the same place, and that comes nearest to being a self-sustained and self-satisfied activity.[13]

The belief that the heavenly bodies moved in perfect circles was not original with Aristotle. It was the common astronomical view of his time. But it was also a matter of common observation that the celestial movements as they appeared to the eye were far from having the uniform speeds and directions that the theory of circularity required. Fact and hypothesis, then, seemed to be at odds and had to be reconciled. Faced with the question, contemporary astronomy had shown extraordinary ingenuity. In particular Eudoxus of Cnidus, whom we may remember as a fellow-pupil of Aristotle's at the Academy, had solved the problem brilliantly by means of a theory of component motions. Assume, he said, that a given body revolves about the earth in a circle, and that the orbit it describes is itself rotated as a whole about the same centre like a hoop that is both revolving and also rotating sideways on its own axis. Suppose, furthermore, that this double movement is turned over and over in some third direction, but still about the same centre. Eventually we might perhaps construct in theory a number of concentric circular movements, and work out directions and velocities for their rotation, from which we could deduce a component that would be the observed irregular move-

[12] *Cf.* Jaeger, *op. cit.*, pp. 155 ff.

[13] On circular motion *cf. Phys.*, VIII, 7–9; Zeller, *op. cit.*, I, pp. 440–441.

ment of the body carried in this complicated system. Applying this idea, Eudoxus calculated with great ingenuity that the behavior of the sun and the moon could be explained on the hypothesis of three of those hoops of motion, and that the orbits of each of the planets could be regarded as the component of four. The mass movement of the whole heaven of fixed stars, he thought, could be accounted for by its own immediate, single rotation.

Upon an amplified and more complicated version of this theory, proposed by the astronomer Callipus, Aristotle seized. And once grasped by him, the mathematical assumptions and formulae were precipitated into solid, physical fact. The hypothetical "hoops" of motion became a system of "wheels within wheels," or rather of hollow sphere within sphere. The result was a "nest" of hollow globes composed of aether, enclosed one within another after the fashion of the "nests" of boxes with which we are all familiar. At the centre of this nest lay the solid ball of half-mixed, half-separated earth, water, air, and fire that formed our globe and the layer of atmosphere separating it from the aetheric shell in which the moon was carried. At the outer circumference revolved a sphere studded with all the "fixed" stars, which seemed to move as one and in invariable relations to one another. Between, whirling every which-way, came the other spheres, with here and there, in the globe indicated by the hypothesis, the planets and the sun and the moon imbedded.[14]

The rotation of the heaven of fixed stars communicated its motion by immediate contact to the sphere next within it, and so on throughout the entire system, and carried the whole nest in a regular daily revolution about the earth. This initial movement was modified in various ways by the directions and speeds peculiar to the individual rotations of the inner spheres. To explain the observed movements of the heavenly bodies, now complicated by the direct transmission of motion through the friction of one shell of aether upon another, Aristotle had to raise the number of inner globes to fifty-five. These survive to-day in the "crystalline spheres" and the "music of the

[14] *Cf. De Caelo,* I–II.

spheres" of our poetry. And with various connections and readjustments culminating in the system of the Alexandrian scientist, Ptolemy, they remained in principle the basis of our astronomy for nearly two thousand years. Indeed, the theory of component circular motions which they embodied survived even Copernicus's revolutionary hypothesis of the double movement of the earth upon its axis and about the sun, and was not finally discarded till Kepler early in the seventeenth century discovered that the planets, including now the earth, move not in circles but in ellipses.

From what we have said, it will be seen that Aristotle wanted to regard the heaven of fixed stars as the physical source of all the motion within the universe. It was for him the primary moving body, and its rotation, transmitted through the other spheres, made itself felt throughout all material existence. Unfortunately, however, for the clearness of both his physics and his theology, its motion could not account for the oblique and even contrary rotations of the inner globes and for their different speeds. To the theological dilemma occasioned by the astronomical necessity of assuming these independent directions and velocities we shall return later. For the moment we are concerned only with the results of the modification of the original impulse by the wayward rotations of the spheres responsible for the orbits of the sun and the moon.

This modification is the immediate cause of all the confusion and variety of events that happen upon the earth. Without it, the four terrestrial elements would have been from the beginning in their proper places. The sphere of the moon would have enclosed a whirling shell of fire, the fire, a shell of air, the air, a globe of water, and the water, a compact ball of earth. In fact there would have been fifty-nine inner spheres instead of fifty-five.[15] As it is, however, the wobbling of the sun from north to south along the path of the ecliptic prevents the elements from separating or from massing at their natural positions. Hence it is the cause of the commingled and unsettled situation without which the whole physical structure of our world and the variety of motion, activity, and life it supports

[15] *Cf.* Ross, *op. cit.*, p. 97.

simply could not exist. Furthermore, the behavior of the sun is immediately responsible for the alternations of the seasons, for variations of hot and cold and for "weather" in general. And finally it instigates and controls even the great rhythm of growth and decay.[16] All in all, since the compounding of the rotation of the heaven of fixed stars with that of the solar and the lunar "nests" of spheres keeps the entirety of our physical and biological phenomenon going, the movement of the outer heaven is the original physical cause of terrestrial activity of every sort.

Still, quite apart from the perplexities raised by the independent movements of the inner spheres, Aristotle's troubles were by no means over. Circular motion might be the perfection of all movement. It might be self-perpetuating and everlasting in character. It might contain no point at which one could say it began or ended. But one was bound, nevertheless, to ask why it existed. Its very perfection betrayed, upon examination, its dependent character. Its endlessness sprang not from rest but from restlessness. Its unbroken, unstarted, unstopping return upon itself and repetition of itself proved to be a mere whirling round and round from "whence" to "whither" in pursuit of some further actualization which it never quite realized. It was not, then, a self-satisfied activity unmoved by anything outside itself. Nor could the rotation of the outer heaven, which embodied this perfect movement, be regarded as the first cause of cosmic motion. There must be a reason, as yet undiscovered, why the revolution of the outer heaven took place.

But if the most perfect form of motion fell short of self-causation and self-sufficiency, all movement was essentially effect, not cause, and nothing that was itself moved could be the reason for motion. The reason had therefore to be an unmoved mover, or in other words something that was not impelled to produce motion by anything outside itself. But it had also to be an unmoved mover in another sense. All exertion of power involved movement and change and realization of undeveloped capacity. The First Cause of motion must, then,

[16] *Meteor.*, I; Ross, *op. cit.*, pp. 107–108.

impart movement without any expenditure of energy on its part. It could not push or pull the outer heaven round by brute force, or so much as twirl it with a touch of any sort, however light, metaphysical, and divine. In a word, the First Cause was not to be conceived as a direct efficient cause. So, quite apart from the impossibility of regarding motion as created, the Mover could not be thought of as a Creator. Its efficiency must be indirectly exercised, as a woman's is when she is most effective. It must make the world move, not by compulsion, but by the influence of an object freely and gladly pursued.

Nay more, Aristotle might have argued, and doubtless would if he had foreseen the Christian doctrine of creation by fiat, an unmoved mover cannot cause the outer heaven to revolve by merely willing it to do so. For will is a composite of unfulfilled desire and of process and exertion moving towards fulfilment. It involves actualization of potentiality. A mover, then, that willed motion to exist would not be unmoved in either of the senses we have been considering. Not only would it be impelled by its wish, but the movement it imparted would be a continuation of the exertion, or, if that be too strong a word, of the process involved in realizing that wish.

Aristotle had now two problems on his hands. In the first place, in order to meet the specifications of an unmoved mover he must find some absolutely self-contained and self-sufficient Form of being wholly devoid of movement, change, desire, will, or other unrealized potentiality of any sort. Secondly, he must be able to show how such a Form of being could account for motion and change without doing violence to the unbroken repose of its own absolutely unmoved nature. The clue to the solution of both these problems he found, not in the upper circles of the universe, but at the very centre of the underworld on the surface of the earth. Here a further study of the process of actualizing potentiality put him on the track of what he wanted. Let us plunge with him from the perfect respectability of the heaven of fixed stars into the confused and turbulent life that goes on beneath the moon, and follow him in his investigation.

## CHAPTER V

## THE SEARCH FOR THE UNMOVED MOVER

### I

The most primitive actualizations of Potentiality and the earliest forms of Matter, or, in other words, the first actual materials which we can know and deal with, are the five physical elements.[1] Of these the aether is born, so to speak, very nearly perfect, with no other capacity than that expressed in the rotation of the heavenly bodies. But fire, air, water, and earth are in a quite different case. They are, to be sure, simple and irreducible. There is no single, homogeneous physical matter underlying them, as, for example, Leucippus and Democritus taught in the Atomic Theory. Physical matter is not one but many. Still, the four elements can be transformed into and arise out of one another.[2] And all sorts of things can be made of them and done with them. In fact there is nothing terrestrial into whose composition they do not enter. They have, then, almost unlimited possibilities for further actualization, and are always unconsciously seeking more and more specific self-fulfilment. The result is both an ascending series of forms of being, marked by less and less unrealized potentiality, and a definite movement or world-process tending towards a minimum of Matter (in the Aristotelian sense) and a maximum of Form. This ascending surge of Being from more to less potentiality and from less to more actuality we may call "Nature."

We must be on our guard, however, against any temptation to think of this world-process in modern evolutionary terms. The theory of evolution teaches that species are not fixed but mutable, that some become extinct and are no longer embodied,

1 For Aristotle on the elements *cf. De Caelo,* III, IV.

2 *Ibid.,* III, 5–IV.

and that others become enacted or, as we say, come into existence. The theory teaches, furthermore, that the more complicated structures come later than the simpler and are developed from them. But for Aristotle all species are fixed and have been existent from the beginning. The more actual does not come later in the process than the more potential. There never was a time when Nature did not realize all her ends to the extent that she realizes them now, and there never will come a time in which they will be in any way differently or more completely realized than they are at present. The formal constitution of the universe is from everlasting to everlasting the same. The world-process neither lays hold of new forms of existence nor relinquishes its grip on old. It merely keeps a given set of Forms continuously and simultaneously enacted throughout all time.

In short, we have in the Aristotelian system a kind of *static* evolution. All degrees of development are embodied once and for all in the constitution of the universe as it is, but there is perpetual motion from degree to degree, and a perpetual replenishment of the substances exemplifying the higher forms from those exemplifying the lower. We might, indeed, almost liken Nature to a great caterpillar stretched upon an already finished ladder of Forms, standing, clinging, pushing, and pulling upon every rung with its innumerable points of contact and support, while pulse after pulse of movement ascended throughout its entire length and breadth from its less secure to its surer footholds on Actuality.

There is another respect, too, in which the Aristotelian theory must be sharply differentiated from the evolutionary hypothesis. Aristotle's system of development is a *moral progress* from lower to higher, measured in terms of human interests, and culminating, so far as terrestrial life is concerned, in man. Evolution, on the other hand, if we are to be strictly and clearly scientific in our use of the term, is not a progress but a non-moral process which does no more than produce one species out of another. The only permissible measure of advance is the increasing organic complexity of the new species the process brings into existence. But the propriety even of such a stand-

ard is doubtful, since the development of a simpler out of a more complicated species by heredity, environment, and whatever other factors may be at work, would be no less evolution, scientifically considered, than the production of a more involved from a less involved organism.

This point has been much obscured by the appropriation of the term "evolution" by the social sciences. These, being concerned with human welfare, and measuring quite properly the growth of human society by a purely moral yardstick, have restricted their use of the word to cover only such processes as make for an increased order and richness in our life. The appearance in the course of Nature of anything that thwarts or retards the realization of the human good they call regress or degeneration, and regard it as an anti-evolutionary interference with natural processes of development. In fact they merely turn the Aristotelian system of static advance into a temporal sequence, and transform its rigid ladder of Forms into an escalator on which the entire universe is being carried onward and upward forever. This substitution of a motto for an equation in formulating the nature of the world-process has not as yet been universally accepted by scientists. But it has found some favor in popular thought, and as a result the successive modifications of physical, biological, and psychological structure, to which alone the term "evolution" should be applied, have become mythologized in the vulgar imagination as a sort of "uplift," which insinuates itself even into the nebular or the planetesimal hypothesis, and will doubtless in time render the latest formulae of relativity "inspirational."

Let us now pick up the thread of our discourse again. Much of the impulse to actualize the potential does not carry Nature very far. It leads her into blind alleys and ends in substances and situations that, although they are far from being high-grade actualities themselves, do not lead to higher things. For instance, Nature is somewhat restricted in the uses to which her unaided forces can put marble, tin, or copper. And were it not for the fact that she has also produced man and with him art, the possibilities these substances afford for making statues, temples, and the like would remain forever unrealized. But

Nature also produces a large number of substances whose potentialities for further actualization can be realized by her unconscious processes.

Thus, to revert to an old example, she turns earth into vegetable matter, and vegetable matter into animal matter. And animal matter she can cast into the form of a rational being like man. Here we have a long and complete thoroughfare leading straight from the bottom of the world-process to the top, and let us say at once, a thoroughfare that will lead us directly to the nature of the Unmoved Mover.

In the light of what we have just said we see, too, that our ladder of existence is really shaped like a pyramid. Its base is as broad as the general possibility of everything and anything, its top is an apex so pointed that all potentiality is squeezed out of it, and only one wholly actual thing is left. And its rungs, as they narrow progressively, exclude the abortive impulses that end on the lower levels in substances with which natural processes can do nothing more. With the lower rungs, or in other words with the behavior of inorganic substances, we have sufficiently dealt, so far as their philosophical implications are concerned. We have only to add that Aristotle's curiosity left unexplored no nook or cranny in physical phenomena, and resulted in a prodigious accumulation of data that we should to-day distribute among physics, chemistry, astronomy, and mechanics. His keenest interest, however, and the scientific work for which he was most noted were provoked when he mounted one more rung in the ladder and found himself in an organic world of *living* matter. As this was an important step in the game of cornering the Unmoved Mover, let us pause a moment and get our new bearings—and our breath.

II

Life, or Soul as we may also call it, is an actualization by Nature of the organic capacities resident in certain combinations of the four elements. It is, to use Aristotle's own phrase, "the first actuality (entelechy) of a natural body furnished with organs." It is "the first," because, as we shall see in a

moment, the mere fact of being alive enables the organism to exercise higher activities and to proceed to more complete self-realization.[3] Its relation to the body may be described as that of cutting to the axe, or of vision to the eye. It is the characteristic function for which the body exists, and from the possession of which we call the body "living."[4] Generally speaking, life is as impossible without the body, and soul is as inseparable from it, as cutting would be without an axe, vision without an eye, or walking without feet.[5]

This dependence of the soul upon the body for her existence[6] does not mean, however, that she is a material entity as Empedocles, for example, and Democritus thought.[7] Nor does it validate the Pythagorean doctrine, already refuted by Aristotle in the *Eudemus*, that she is a kind of Pythagorean "harmony" of the body.[8] On the contrary, not only is the soul absolutely incorporeal,[9] but she is more than a mere condition or state of the body, such as a harmony would be.[10] She is the Form of the body,[11] and as such is not to be confounded with any of the potentialities that enable her to exist.[12] But, at the same time she is enacted only in and by the body, is one with it, and forms with it a single indivisible living being, just as the shape into which a bit of wax is moulded forms with the wax, not two separate entities, but a single indivisible object.[13]

The connection of the soul with the body is also shown by the fact that almost all our mental states are the conscious forms of physiological conditions. Thus properties of the soul, like courage, gentleness, fear, pity, audacity, joy, love, and

[3] *De An.*, II, 1, 412*a*, 1. *Cf.* Ross, *op. cit.*, pp. 134–135.
[4] *De An.*, II, 1, 412*b*.
[5] *De An.*, II, 1, 413*a*, 4 ff.; *Gen. An.*, II, 3, 736*b*, 22 ff.
[6] *De An.*, II, 2, 414*a*, 12 ff.
[7] *De An.*, I, 2, 403*b*, 28 ff., 404*b*, 8 ff., 3, 406*b*, 15 ff., 5, 409*a*, 409*b*, 23 ff.
[8] *De An.*, I, 3, 404*a*, 21 ff., 4, 408*a*, 30 ff.
[9] *De An.*, II, 1, 412*a*, 15 ff.; *Part. An.*, I, 1, 641*a*, 14 ff.; *Gen. An.*, II, 4, 738*b*, 26 ff. *Met.*, VIII, 3, 1043*a*, 35.
[10] *De An.*, I, 4, 407*b*, 408*a*, 30.
[11] *Met.*, VII, 10, 1035*a*, 14 ff., 11, 1037*a*, 5; VIII, 3, 1043*a*, 35.
[12] *De An.*, II, 2, 414*a*, 12 ff.
[13] *De An.*, II, 1, 412*b*, ff.; *Met.*, VIII, 6, 1045*b*, 11 ff. *Cf.* Ross, *op. cit.*, pp. 132–133.

hate, are dispositions of the body.[14] Still, Aristotle admits, there may be a part of the soul that is not the actualization of capacities inherent in the body, and if such a part exists it will be separable and independent.[15] The study of such a part, however, would not belong to psychology but to metaphysics.[16] Even this retention, however, of a separable part of the soul, cannot prevent us from realizing how far Aristotle departed, as he worked out his theory, from the views he held in his youth and set forth in his dialogues.[17]

If the soul is one with the body, she is still more a unity in herself. Although she has various functions and faculties,[18] she is not divided up among them. She is present in her entirety in all her activities.[19] Even the three kinds of soul, which we are about to discover, are not three souls but one soul, in spite of the fact that they are quite distinct and that the lower may exist without the higher. They represent progressive actualizations of one and the same principle.[20] In short, in dealing with the tripartite division of the soul, we have on our hands the same delicate problem as taxes the balance and the agility of the Christian theologian when dealing with the Godhead—the problem of neither dividing the substance nor confusing the persons.

The capacity for life actualized by soul is not possessed by all bodies. Pygmalion, aided though he was by Aphrodite, might not have been able to kiss into life a statue made of inorganic marble instead of organic ivory. If the four elements are to combine to form an organism, a kind of catalyzer must be present in the shape of "pneuma," a veritable breath of life, which Aristotle regards as akin to the fifth element, aether. It is this "pneuma" which is the material basis of the animate characteristics of a body, and which, through mixture with the seed, enables living things to transmit life and to reproduce.[21]

14 *De An.*, I, 1, 403*a*.
15 *De An.*, I, 1, 403*a*, 2 ff.; II, 1, 413*a*-2, 413*b*.
16 *De An.*, I, 1, 403*b*.
17 *Cf. supra*, pp. 32–34.
18 *De An.*, I, 5, 411*a*.
19 *Ibid.*
20 *Cf.* Ross, *op. cit.*, pp. 129 ff.
21 *De Gen. An.*, II, 3, 736*b*, 30 ff.

Some organisms, however, both animal and vegetable, may, as a rule or as an exception to it, be generated spontaneously.[22]

The distinctive mark of a living body, according to Aristotle, is its power of doing things by itself. Its movements and changes arise from within, and conform to an inner plan. The most primitive expressions of the capacity for self-direction are the processes of nutrition, of growth and decay, and with one or two exceptions, of reproduction. These are common and indispensable to all organic existence, both vegetable and animal. We may therefore speak of the basic and universal functions of animate matter, by which all forms of life are supported, as constituting a "nutritive" or "vegetative" soul.[23]

Animals, however, are distinguished from vegetables, in Aristotle's opinion, by the possession of new functions superadded to those shared with plants. They not only live, they feel. They have sensation.[24] Just as nutrition is the function characteristic of all organic beings, no matter what other functions some of them may develop, so the sense of touch is the function common to all *sentient* organic beings, whatever their additional and more specialized forms of perception may be.[25] Sensation in general is diversified not only by the different senses, but by the feelings of pleasure and pain, and by the consequent appetites, desires, loves, and hates experienced by the organism.[26] It comprises, therefore, *feeling* in the widest sense of the word.

These further functions displayed by living matter when it is actualized in animal form Aristotle calls the "sensitive" soul.[27] The sensitive soul may properly be regarded as the actuality of which the vegetative or nutritive is the potentiality, just as the vegetative is the realization of capacities possessed in certain circumstances by inorganic matter. For the ability to feel is confined to living bodies and is dependent upon the organic character expressed in their nutritive activities.[28] An essential

22 *Gen. An.*, I, 715*a*, 25 ff.; II, 732*b*, 15; III, 759*a*, 33. *Cf.* Taylor, *Aristotle*, p. 61.

23 *De An.*, II, 1, 412*b*, 16, 413*a*, 20 ff. *Cf.* Zeller, *op. cit.*, II, pp. 1 ff.

24 *De An.*, II, 2, 413*b*.

25 *Ibid.*

26 *De An.*, II, 3, 414*b*, 1 ff. *Cf.* Taylor, *op. cit.*, p. 64.

27 *Ibid.*, 414*b*. *Cf.* Zeller, *op. cit.*, II, pp. 21, 27.

28 *Ibid.*, 415*a*.

difference between sensation and nutrition appears in their relations to the external objects that they perceive or digest. Both functions are, to be sure, realizations of the characteristic ability of an organic body to turn other bodies to its uses and replenish itself from things outside itself. But, whereas in the process of nutrition a living body extracts and digests the *matter* from other bodies and spits out the form, in the process of sensation the reverse is true. The sense organ sucks only the *form* from the external object and assimilates it alone, leaving the matter to one side.[29]

III

Aristotle's inquiry into the distinctive structures and activities of the organic forms of matter was not only so extended, painstaking, and discriminative as to make him the father of the biological sciences; it also shows a keenness of observation, a capacity for perceiving and infering analogies, and an ability to classify and organize that give him first rank among the biologists and natural historians of all time. Indeed, it is his work in this field that reveals most clearly both the essentially scientific disposition of his mind and his genius as a scientist. He was acquainted, though in many cases superficially, with five hundred or so different kinds of animals, and he had probably dissected and investigated in detail examples of some fifty species covering the whole range of the animal kingdom. Whether he ever dissected the human body is doubtful, but he seems to have examined human embryos.[30] Many of his conclusions naturally appear fanciful and primitive to us to-day, but most of them reveal him as a man far in advance of his times, and some of them still hold good. Thus to choose a few examples of such observations as have stood the test of time, we have his insistence that whales are mammals—a fact that otherwise remained unremarked till the sixteenth century;[31] his studies of the growth of chicken embryos;[32] his

[29] *De An.*, II, 12, 424*a*, 18 ff. *Cf.* Ross, *op. cit.*, p. 137.
[30] *Cf.* Ross, *op. cit.*, pp. 112–113.
[31] *Hist. An.*, I, 5, 489*b*; III, 20, 521*b*, 21 ff. *Cf.* Ross, *op. cit.*, p. 113.
[32] *Hist. An.*, VI, 3, 561*a*, 4 ff.

descriptions of the muscular mechanism of locomotion,[33] of the process of digestion in ruminants,[34] and of the habits of bees;[35] and the discoveries he made concerning the method of reproduction in cuttle-fish and the other cephalods,[36] and perhaps in eels,[37] which have been only recently rediscovered and verified.

Aristotle was also far-sighted and frequently correct in his application of the principle of analogy to organic structures. The roots of plants, he tells us, correspond to the mouth in animals.[38] The place of bone in the vertebrates is taken by cartilage or shell in the invertebrates.[39] So, too, hair, feathers, scales, and mail[40] are analogous, as are arms, forefeet, wings, and the claws of crustaceans.[41] Again, teeth and bills go together, and also gills and lungs.[42] And egg-shells, the membrane enclosing the embryo, and chrysales,[43] although apparently different, are essentially identical structures. Then, too, as a matter of comparative psychology, men and animals possess many traits in common, and indeed "psychologically a child hardly differs for the time being from an animal."[44]

Unfortunately his botanical treatises have been lost, and we are forced to rely for our knowledge upon scattered references in the works on natural history, and upon the writings of his pupil Theophrastus. But here, too, we find evidence of his omnivorous curiosity, his industry, and his keenness of perception and power of generalization.[45]

The vital functions of organic matter such as digestion and nutrition, respiration, the nature and behavior of the blood,

33 *De Motu An.* *Cf.* Zeller, *op. cit.*, II, p. 47.
34 *Hist. An.*, II, 17, 507*a*, 33 ff. *Part. An.*, III, 14, 674*b*, 7 ff.
35 *Hist. An.*, V, 21, 22, 553*a*, 17 ff.; IX, 40, 623*b*, 4 ff.
36 *Hist. An.*, V, 6, 541*b*, 8 ff.
37 *Legacy of Greece*, p. 149 ff.
38 *De Anima*, II, 4, 416*a*, 4 ff. *De Incess. An.*, 5, 706*b*, 5 ff.
39 *Part. An.*, II, 8, 653*b*, 33 ff. *Hist. An.*, III, 7, 516*b*, 12 ff.
40 *Part. An.*, I, 4, 644*a*, 21; IV, 11, 691*a*, 15 ff. *Hist. An.*, I, 1, 486*b*, 17 ff.; III, 10, 517*b*, 1 ff.
41 *Part. An.*, IV, 12 692*b*, 15 ff.
42 *Part. An.*, I, 5, 645*b*, 6; III, 6, 669*a*, 1 ff.; IV, 1, 676*b*, 27. *Hist. An.*, VIII, 2, 589*b*, 19 ff. *De Resp.*, 10, 475*b*, 15 ff.
43 *Hist. An.*, VII, 7, 586*a*, 15 ff. *Gen. An.*, III, 9, 758*a*, 25 ff.
44 *Hist. An.*, VIII, 1, 588*a*, 13 ff., 588*b*, 4.
45 *Legacy of Greece*, p. 149. For Aristotle on plants *cf.* Zeller, *op. cit.*, II, pp. 33 ff.

reproduction, the phenomena of sleep, and the like, were no less carefully studied than organic structures. Here, however, Aristotle was more a child of his age and made little or no progress in the direction of modern knowledge. For him the heart is the seat of life and the most important source of the warmth of the body.[46] In it the food digested by the stomach[47] and transmitted by the surrounding veins is turned into blood,[48] which is then diffused throughout the blood vessels to the rest of the body.[49] Of the circulation of the blood Aristotle had no inkling.[50] The brain and the lungs are cooling apparatus,[51] the liver and the spleen help keep the abdomen warm.[52] Bile is a waste-product pure and simple.[53] The intestines are simply organs of excretion,[54] though Aristotle seems to think that in some animals the digestive process may continue in the small bowel.[55]

The functioning of these organs and the persistence of life in the organism depends, at least in the higher animals, upon the production and maintenance of some degree of warmth. There is a central heating system, the furnace of which, as we have just seen, is the heart.[56] Sleep is a damping of this organ by vapors given off by the process of digestion, which, rising to the brain, are cooled there and then sink to the cardiac region. During sleep the body is rested, reinvigorated, and given a fresh start for its next turn at waking life.[57] Death occurs when the vital fires either go out or are put out by a slow, or by a violent and immediate, failure of combustible material. Or something may go wrong with the drafts, as when the lungs

46 *De Resp.*, 20, 480*a*, a ff. *De Vita*, 4, 469*b*, 6. *Part. An.*, III, 7, 670*a*, 23.

47 For a description of digestion *cf. Part. An.*, III, 14, 674*a*, 21 ff. *Hist. An.*, II, 17, 507*a*, 24 ff.

48 *Part. An.*, 3, 650*a*, 1 ff. *De Somno*, 3, 456*b*, 2 ff.

49 *Cf. Part. An.*, I, 19, 726*b*, 9 ff.; II, 3, 737*a*, 18 ff.; IV, 1, 766*b*, 8 ff.

50 *Cf.* Zeller, *op. cit.*, II, p. 41, 2, 6.

51 *Part. An.*, II, 7, 652*b*, 15 ff.; III, 6, 668*b*, 33 ff.

52 *Part. An.*, III, 7, 670*a*, 20 ff.

53 *Part. An.*, IV, 2, 677*a*, 25 ff.

54 *Part. An.*, III, 14, 674*a*, 10 ff.

55 *Part. An.*, III, 14, 675*b*, 28 ff.

56 *Gen. An.*, II, 4, 738*b*, 16. *De Vita*, 4, 469*b*, 6 ff. *Part. An.*, II, 3, 650*a*, 2 ff. *De Juvent.*, 4–5. *De Resp.*, 8.

57 *De Somno*, 2–3.

in old age become rusty, and fuel may be burned up more quickly than it can be supplied.[58] Some of the lower forms of life, instead of having a central heating apparatus, seem to have little stoves in every room. For if they are cut to pieces, each little bit goes on running about on its own account, and shows evidence of sensation and even of imagination.[59]

To the process of reproduction Aristotle devotes considerable space. Though spontaneous generation occurs in some cases, almost all organisms are produced by others of the same type. In the case of plants, and in that of animals that cannot move, Aristotle seems to have felt that reproduction is asexual and requires but a single parent. But in the great majority of living beings a differentiation and a union of the two sexes is necessary.[60]

Aristotle's discussion of the mechanism of sexual reproduction still commands the admiration of biologists.[61] The origin of the male seed, the mechanism of impregnation (Aristotle was ignorant of the existence of the ovum as well as of the spermatozoon, and regarded the menses as the female's contribution to the reproductive process), and the determining factors of heredity and of sex were all treated by him at length. The seed he regarded as a terminal product of the blood, and as the carrier both of the general characteristics of the species and of the individual peculiarities of the parent that are actualized by the offspring.

Following the old Greek view that the role of the female in generation is purely passive and receptive,[62] and that the child is no blood relation of its mother,[63] he gave to it a philosophic twist and maintained that whereas the male provides the Form of the new organism, the female merely supplies the Matter.[64] But the Form is not impressed *in toto* at the moment of conception. All the parts of the organism are not present

58 *De Vita,* 4–5.
59 *De An.,* II, 2, 413*a,* 16 ff.
60 *Gen. An.,* I, 1, 715*a,* 18 ff.
61 *Cf.* Zeller, *op. cit.,* II, p. 148, n. 3; Ross, *op. cit.,* p. 121.
62 *Cf.* Plato, *Timaeus.*
63 *Cf.* Aeschylus, *Eumenides,* 606.
64 *Gen. An.,* I, 2, 716*a,* 1 ff.

in miniature from the beginning.[65] The seed merely imparts motion to the matter provided by the female, and this motion communicates itself to more matter. Thus little by little, as the process of gestation goes on, the structure is built up and the Form is actualized.[66] To put it in modern terms, Aristotle rejects the theory of pangenesis and forestalls the generally accepted view of epigenesis.[67] And although we may have a more exact knowledge to-day of what takes place when the spermatozoon enters the ovum, we have no better description than Aristotle's of the why and wherefore of the process.[68]

The sex of the embryo is determined primarily by the relative strength of the male and female elements. When the seed is stronger than the female element, the embryo is hotter, and by virtue of its superior heat is able to transform blood into sperm and become male. But if the material provided by the female sufficiently resists the motion imparted by the seed, the embryo is cooler, is unable to transmute the blood, and develops along feminine lines.[69] Monstrosities are, like girls, entirely the mother's fault, only more so. They occur when the female, material principle puts up an even stronger fight against the movements initiated by the form-bearing sperm.[70] The resemblance of offspring to the father or mother, or to more remote paternal or maternal ancestors, is governed by the proportion of the general masculine traits in the seed to the characteristics drawn from the individuality of the particular parent, and by the relation of this component to the matter provided by the female. We need not, however, enter into Aristotle's rather elaborate computation of the ratios in question.[71]

This theory may not have stood the test of time, but it was a brilliant generalization from the data with which Aristotle had to work. Moreover, before dismissing it as primitive and fanciful we should remember that in spite of all our discoveries with regard to spermatozoa, ova, chromosomes, genes, and

65 *Gen. An.*, II, 1, 734*a*, 1 ff.
66 *Gen. An.*, 3, 737*a*, 18 ff.
67 *Cf.* Ross, *op. cit.*, pp. 119 ff.
68 Ross, *op. cit.*, p. 121.
69 *Gen. An.*, IV, 3, 767*a*, 35 ff.
70 *Ibid.*, 769*b*, 10 ff.
71 *Ibid.*, 767*a*, 35 ff.

the like, the problems of heredity and sex-determination still remain unsolved, and that perhaps our speculations will seem as odd and inadequate in the eyes of future biologists as Aristotle's do to us.

We have neither the space nor the time to follow Aristotle's biological investigations in further detail. It remains merely to note certain conclusions of philosophical importance that he drew from them, or perhaps read into them. The first of these is a powerful reinforcement of his general theory of teleology with which we are so familiar. All living structure and function, however minute and humble, seems to him to be obviously fashioned and actuated by a purpose of some sort, and to be designed by Nature as the most suitable means she can find for attaining her ends. And secondly, his belief that the universe exhibits a progress from pure Potentiality to pure Actuality, is borne out by his ability to arrange the whole animate creation in an ascending series culminating in man.

His insistence on the first point is persistent and detailed.[72] Every organ exists in order to perform its function, and the reason why it is there, and why it has the structure it has, is because its presence is necessary and its structure is adapted to the performance of that function.[73] And the whole complex of the lower organic functions and structures is designed to support life, and is fashioned for that purpose by the power of the vegetative or nutritive soul.[74] To explain that complex by chance or mechanical necessity or, as Empedocles did, by a haphazard production of organisms, some of which merely happened to be so constituted that they could survive, is impossible.[75]

Again, the structures and the functions thus organized into a living whole are generated as they are for the sole purpose

72 For teleology in Aristotle's biology *cf.* Zeller, *op. cit.*, II, pp. 10 ff. Ross, *op. cit.*, pp. 123 ff.

73 *Part. An.*, II, 16, 658*b*, 53 ff.; III, 1, 662*b*, 1 ff., 2, 662*a*, 25 ff., 14, 674*a*, 19 ff., 675*b*, 17 ff.; IV, 12, 693*a*, 10 ff., 13, 696*b*, 24 ff. *Gen. An.*, II, 674*a*, 36 ff., *b* 16 ff. *Phys.*, II, 8, 198*b*, 34.

74 *Part. An.*, I, 1, 641*a*, 28. *Gen. An.*, II, 4, 740*b*, 25 ff. *Cf.* Zeller, *op. cit.*, *loc. cit.*, for other references.

75 *Phys.*, II, 8, 198*b*, 16 ff. *De An.*, II, 4, 415*b*, 28 ff. *Part. An.*, I, 1, 640*a*, 19 ff.

of enabling higher and more specialized activities to be realized.[76] In the process of gestation the more universal features of all organic life are developed first, as a preparation for the structure peculiar to a given species.[77] And the nutritive soul as a whole is actualized because it is indispensable to the existence of sensation.[78] Moreover, the lower imitates and lays hold of the higher so far as its limited capacities allow.[79] Reproduction, for example, as Plato also remarked, overcomes in a sense the mortality of the individual by enabling him to perpetuate himself in his descendants, and by thus ensuring the everlasting continuance of the species it reflects the eternal.[80] This is the reason why even plants strive to reproduce, and why reproduction is their highest activity. Through the exercise of the function they participate in their humble way in the changeless and the divine.[81]

But the purposes of Nature cannot always be expressed and carried out without let or hindrance. Her designs have to be enacted in a slipshod material that can never embody them whole-heartedly,[82] and her aims have to reckon with a factor of mechanical necessity which, though she may force it to cooperate with them, curtails to some extent their attainment in their proper form.[83] Moreover, the possibility of acting in a contrary manner and of doing the other thing, which is inherent in the potential character of Matter, introduces an element of real chance into the universe, and as a result accidents will happen in the best-regulated world.[84]

The interference of these factors with the realization of Nature's ends accounts not only for obvious failures of purpose

[76] *Gen. An.*, II, 3, 376*a*, 27 ff.
[77] *Gen. An.*, II, 6, 742*a*, 36 ff.
[78] *De An.*, II, 3, 415*a*, 1 ff.
[79] *De An.*, II, 4, 415*a*, 26 ff.
[80] *Gen. An.*, II, 1, 731*b*, 25 ff.
[81] *De An.*, II, 4, 415*a*, 26 ff.
[82] *Met.*, VI, 2, 1027*a*, 13 ff. *Gen. An.*, IV, 10, 778*a*, 5 ff. Zeller, *op. cit.*, I, pp. 361, 465 ff.
[83] *Part. An.*, I, 1, 642*a*, 1 ff. *Gen. An.*, II, 6, 743*b*, 16 ff.; IV, 8, 766*b*, 32 ff. *Phys.*, II, 9, 199*b*, 34 ff. *Cf.* Zeller, *op. cit.*, I, pp. 359 ff.; II, pp. 17 ff.
[84] *Met.*, V, 30, 1025*a*, 14 ff.; VI, 2, 1026*b*, 31 ff., 1027*a*, 13 ff. *Gen. An.*, IV, 10, 117*a*, 8. *Cf.* Zeller, *op. cit.*, I, pp. 362 ff.

like females,[85] monstrosities, malformations,[86] degenerations,[87] superfluous and useless organs and growths,[88] and the like. It also explains the haphazard variations in the structures of individuals of the same species, as, for example, differences of height, shape, complexion, color, that serve the same purpose equally well, and for which therefore no particular teleological reason can be found. Thus the eye in general exists for the purpose of vision, but why there are blue eyes as well as brown, or vice versa, cannot be explained purposively, since both kinds are equally well adapted to seeing.[89] We must always remember, however, that many apparently useless features may indirectly serve some end, even if it be the purely formal one of marking the class to which the animal belongs or of contributing balance or ornament to its structure.[90] In any case, Nature is always doing her best to turn all contingencies and necessities to a good use and to bend them to her purposes.

The aim of this biological effort is clearly manifest. It is the production of man. All the lower grades of animal life are incidental to the attainment of this end, and indeed might be said to represent shortcomings in Nature's work imposed upon her by unfavorable contingencies.[91] In this gradual ascent towards the human form there are no sudden breaks or jumps. Even the transition from inanimate to animate matter affords us no "exact line of determination." In plants again, "there is a continuous scale of ascent towards the animal." But where plant life merges into animal it is impossible to decide. Certain forms of marine life leave us "at a loss to determine whether they be animal or vegetable." Some of these seeming animals "give no indication whatsoever" of sensibility, whilst others indicate it but indistinctly.[92]

85 *Cf. supra,* p. 95.

86 *Gen. An.,* IV, 3, 767*b,* 13, 769*b,* 10 ff., 770*b,* 9 ff.

87 *Gen. An.,* II, 3, 767*b,* 13, 769*b,* 10 ff., 770*b,* 9 ff.

88 *Part. An.,* IV, 2, 677*a,* 11 ff.; III, 2, 663*a,* 8 ff. *Gen. An.,* I, 18, 724*b,* 34 ff.

89 *Gen. An.,* V, 1, 778*a,* 29 ff. Ross, *op. cit.,* pp. 123 ff.

90 *Part. An.,* III, 3, 665*a,* 23 ff.; 4, 665*b,* 20; 5, 667*b,* 34; 7, 669*b,* 18 ff.; II, 14, 658*a,* 20 ff. *Hist. An.,* II, 8, 502*b,* 22.

91 *Cf.* Zeller, *op. cit.,* I, p. 467.

92 *Hist. An.,* VIII, 1, 588*b,* 4 ff. *Part. An.,* IV, 5, 681*a,* 12 ff.

So too, the passage from the lower animals to man is almost equally indistinct, both physically and mentally. Creatures like the ape, the monkey, and the baboon "share the properties of man and of the quadruped."[93] And the development of conscious life is, if anything, more continuous. The difference between the human mind and the brute is for the most part one of degree and not of kind. Even knowledge, wisdom, and sagacity have their equivalent, potentially at least, in the higher animals. "Psychologically, a child hardly differs for the time being from an animal."[94] For that matter, the only difference is that the child has a capacity for thought such as will permit him, when he grows up, to receive and exercise the faculty of pure reason—the activity that thinks and philosophizes, and grasps truth and supersensible being. But this capacity, called by Aristotle "potential reason," though it may distinguish man from other forms of life, is still inseparable from his animal nature.[95] It is a characteristic of the human animal and continuous with the sensitive soul that man shares with the rest of the brute creation. The only thing that is non-animal and not an actualization of capacities provided by the body is the so-called "active reason," which is present in our thinking when we discount the personal, the temporal, and the local in our point of view and lose ourselves in contemplation of the universal and the eternal. But even this could not function as a human mind and enlighten our experience with knowledge of the eternal, except for the basis for thought provided by Nature in the physical organism.

This continuous ascent is paralleled, Aristotle thinks, by purely quantitative changes in certain wholly "vegetative" structures and functions, which afford him a strictly scientific basis for the classification of animals. Higher and lower are proportional to the extent to which the parent organism forms and finishes its offspring before giving birth to them. And this, in its turn, is almost without exception a question of the degree of heat in the blood or in the analogous fluids.[96] Thus, at the

[93] *Hist. An.*, II, 8, 502*a*, 14 ff.
[94] *Hist. An.*, VIII, 1, 588*a*, 18–588*b*, 4.
[95] *De An.*, III, 5, 430*a*.
[96] *Gen. An.*, II, 1, 732*a*, 24–733*b*, 16.

bottom of the scale, and, as we have seen, almost indistinguishable from plants, come most molluscs and other primitive forms of life, which are either spontaneously generated, or, if they reproduce at all, do so asexually by fission or by an effusion of slime. These forms are quite bloodless. So, too, are the insects, whose young are born as worms or gnats and undergo a long process of external development before attaining their proper species. Next come the still bloodless cuttle-fish, crabs, and the like, which lay eggs of sorts, and then the true fish. In the fish blood puts in an appearance, but it is cold, and the egg in consequence is still soft and imperfect. Above them we have the cold-blooded reptiles whose eggs are better developed, and above them, again, the birds, which still lay eggs, but perfect ones, because their blood is warm. Finally, we have the mammals, whose superior warmth enables them to gestate their young within their own bodies, and to bring them forth alive and completely formed without recourse to the egg stage.[97]

Other methods of classification are also suggested by Aristotle,[98] but they are not so exhaustive. And, of course, exceptions occur even in the comparatively complete scheme we have just reviewed. For instance, whales, he feels, are in most respects to be regarded as fishes. They are cold-blooded, in his opinion, and produce eggs. But since their eggs, he thinks, are retained and hatched within the parent body, and since they bring forth their young alive and suckle them, they are also to be reckoned as viviparous and mammalian.[99] Vipers, too, hatch their eggs internally and produce their offspring fully formed.[100]

We have now completed our survey of the organs and functions developed by physical matter when its higher potentialities are actualized by the vegetative or nutritive soul. But, look where we may, we find no activity that in any way can qualify for the post of Prime Mover. None is without a material sub-

[97] For this scheme of classification *cf. Gen. An.*, II, 1, 732*a*, 24–733*b*, 16. Ross, *op. cit.*, pp. 110–117.

[98] *Hist. An.*, VIII, 2, 589*a*, 11 ff.

[99] *Gen. An.*, I, 9, 718*b*, 26 ff.

[100] *Gen. An.*, I, 10, 718*b*, 31 ff.

stratum or some end beyond itself. None functions without change and motion, or imparts movement without expending energy. We must, therefore, go on with our search and proceed to investigate the structures and operations characteristic of matter when it not only lives but begins to feel as well; in other words, when a sensitive is added to the vegetative soul. We pass, that is, to psychology, and to such physiology as is concerned with the immediate apparatus supporting consciousness.

## IV

Aristotle's researches into the workings of the sensitive soul, though more restricted, are no less minute than his studies of mere living.[101] Sensation first appears at the animal as contrasted with the vegetable level, and indeed, is the mark that differentiates animals from plants. It includes, as we have seen, not only mere perception, but the pleasure and pain by which perception may be attended and the emotions that may be provoked by it.[102] Its essential and distinguishing function, as we have also already noted, is the extraction of the form from the matter of an object.[103] It receives, we are told, the sensible qualities of things without their matter, just as wax takes the seal of a gold or an iron ring, without laying hold of the gold or the iron itself and converting it into wax.[104]

We must not, however, consider the soul a purely passive recipient of form, as wax is when it receives the impression of the device on the signet ring. On the contrary the soul is an active factor in the process. She does not merely receive the sensible quality *from* the object, she also helps actualize it *in* the object.[105] For example, a thing does not possess color until the eye sees the color, or sound until the ear hears the sound. In the absence of an eye or an ear, it merely possesses the potentiality of being seen or heard when brought into con-

101 For discussions of Aristotle's psychology, *cf.* Zeller, *op. cit.*, II, pp. 58 ff. Ross, *op. cit.*, pp. 129 ff., and particularly pp. 136 ff.

102 *Cf. supra*, p. 91.

103 *Cf. supra*, p. 92.

104 *De An.*, III, 1, 424*a*.

105 *De An.*, III, 2, 425*b*, 22 ff.

tact with the sense organ. This is in principle much the same as our modern teaching that when ether waves of a certain sort impinge upon the eye we see a certain color, or when air waves of a certain kind strike the ear we hear a sound. But, Aristotle continues, when the sense-organ actualizes the capacity of the object for becoming visible or audible, then the resultant sensible quality or form exists *in both the percipient and the thing perceived.*[106] The object is really itself colored or resonant, at the moment that we are seeing or hearing it. To use modern scientific terminology, the ether waves must be supposed actually to blush in themselves, or the air waves really to ring with a melody of their own, whenever they impinge upon the eye or ear and evoke the sensation of red or of musical sound. Nay more, we must suppose the production of the quality in the perceived as well as in the perceiving body to be brought about, not only by the action of the stimulus upon the sense-organ, but by a reciprocal action of the sense-organ upon the stimulus.[107]

If, then, we are still to hold to the simile of the signet ring, we must not think of the face of the metal seal as already engraved before its impression upon the wax takes place. It will merely possess a capacity for developing, at the instant that it comes into contact with the wax, corrugations in its own surface that form the appropriate crest or monogram. In the same way, the wax will have power to raise, when it is in contact with the ring but not before, weals or ridges that correspond to and interlock with the furrows that appear simultaneously in the metal. In other words, the impressing of the ring upon the wax will actualize one and the same form at one and the same moment in two different media. And while the contact lasts, the same identical form will actually inhere in them and be possessed by them both. Take the ring away from the wax, however, and the fissures on the face of the seal will immediately disappear and become once more a mere invisible predisposition to occur again when the contact is renewed.[108] But the ridges in the wax, curiously enough, although they are at

106 *De An.*, III, 2, 425*b*, 22 ff.
107 *Ibid.*
108 *Ibid.*; *Cat.*, 7, 35*b* ff.; *Met.*, IV, 5, 1010*b*, 30 ff.

once flattened and their outlines become faint and blurred, must not be thought of as disappearing from sight altogether. Because of a peculiarity of sensation they will linger on as memories and images.[109]

The sum and substance, then, of the Aristotelian view is this. When our eyes are open, their interaction with the external object produces one and the same visible quality both in the object and in themselves. Whenever they are shut there is no longer any color actually existent either in the thing perceived or in the organ perceiving it. In object and perceiving organ alike color has lapsed from an actual state to the potential one of being able to reappear whenever the eye is reopened and the object is there. But whereas darkness has descended abruptly and absolutely upon the medium conveying light, and silence upon the air, in the perceiving body there is twilight and echo. A sensation can be recollected and pictured after it has lapsed.

This theory would seem to betray a certain confusion in Aristotle's mind and a failure to make a complete analysis of the situation. Not only, we are told, are sensible qualities experienced in and by the sense-organ (Aristotle knew nothing of the nervous system or the functions of the brain) but our consciousness of them is nothing but a reproduction of the perceived qualities by the perceiving body. Thus the seeing of a color consists in the interior of the eye becoming that color, and is nothing more. In the same way, hearing is simply the ear becoming resonant, tasting simply the tongue becoming appropriately flavored. Obviously such an account neglects the subjective, conscious character of sensation. We might agree with Aristotle that perception occurs only when there is a union of certain qualities in the perceived object with corresponding, though not, as Aristotle thought, necessarily similar properties in the sense-organ. We know, for example, that ether waves of a certain length and rate of vibration always evoke certain chemical responses from the retina, and that when the wave acts upon the retina and the retina reacts upon the wave, we see a color. But, unless perhaps we are behaviorists, we should no more identify the chemical re-

[109] *Cf. De An.*, III, 3, 429*a*, 3 ff.

action of the eye with the color *sensation* than we should identify the physical action of the ether with it. Even if it so chanced that the retina actually turned red and looked red when stimulated by the ether waves that make us see red, we should not confuse the color the retina turned with our awareness or perception of that color. Sensation we feel, once more with due apologies to behaviorism, is a state neither of the perceived body nor of the sense-organ but of a third something, consciousness. Aristotle, however, mixes up the mental and the physical, the subjective and the objective aspects of sensation. He fails to distinguish consciousness from the physical conditions with which consciousness is associated.[110]

But to return to Aristotle's study of perception. The basic sense, common to all animals from the lowest to the highest, is touch.[111] Taste, which is a specialized form of touch, is equally indispensable and widespread because of its alliance with the function of nutrition.[112] Smell is analogous to taste in many respects,[113] but, like sight and hearing, it is absent in some animals.[114] Sight is the principal sense,[115] though hearing, which is less important so far as the sensitive soul is concerned, is more necessary as a condition for the actualization of the rational soul and the exercise of thought by human beings. For hearing is the basis of language, and language the foundation of reasoning. Those born blind develop more intelligence than those born deaf and dumb.[116] The relative importance of a sense may perhaps be regarded as proportional to the degree of thoroughness with which it sucks the form out of its object.[117] Thus touch extracts and distinguishes primarily those properties that are common to all bodies,[118] whereas the other senses progressively sample more highly specialized and distinctive brands.

110 *Cf.* Ross, *op. cit.*, pp. 136–137.
111 *De An.*, II, 2, 414*a*, 2–4; 3, 415*a*, 3–6; III, 13, 435*a*, 12 ff.
112 *De An.*, II, 10; *De Sensu*, 1, 436*b*, 12 ff.
113 *De An.*, II, 9.
114 *De An.*, II, 2, 414*a*, 2–4; 415*a*, 3–6.
115 *De An.*, III, 3, 429*a*, 2.
116 *De Sensu*, 1, 437*a*, 1 ff.
117 *Cf.* Ross, *op. cit.*, p. 130.
118 *De An.*, II, 11, 423*b*, 26 ff.

Our sense-organs, however, are never in direct contact with their objects. They drink in the outside world always through a straw. An intervening medium is necessary through which impressions are conveyed to them. In the case of touch this go-between is the flesh. Our skin does not feel in itself, it merely transmits the qualities of the object with which it is in contact to the heart, where their actual perception takes place.[119] Taste is passed on to the heart by the good offices of the tongue and palate.[120] So it is the heart even more than the tongue that becomes flavored. Something common to air and water, moisture we might say, brings smells to our nose. Air conveys the resonant qualities of the object to the ear, and the medium of vision is a luminous transparent quality, particularly characteristic of the substance of the stars, but found also in water and in the atmosphere.[121] In the case of the eye, the medium penetrates into the structure of the organ itself and suffuses the fluid in the crystalline lens. The seeing is done at the back of the eye.[122] Aristotle, we might say, is on the road to the discovery of the retina.

Now, all our sense-organs are able to perceive opposite qualities, black and white, loud and soft, rough and smooth, and the like. Since these extremes, when perceived, become properties of the sense-organ as well as of the object, the sense-organ must be composed of a material capable of receiving both them and the qualities lying between them. Naturally, such a material can *actually* possess none of the qualities in question, for if it were *essentially* any one of them, it could not become the others. Thus if the substance of the eye were actually and essentially white, it could not become black or red or any other color without ceasing to be the substance of the eye, and therefore, according to Aristotle's theory of vision, could not see any color except white. The material, then, of the sense-organs must be simple and homogeneous, possessed actually

[119] *De An.*, II, 11, 422*b*, 35 ff., 423*b*, 1 ff. *Part. An.*, II, 10, 656*b*, 35 ff. *De Vita.*, 3, 469*a*, 5ff.

[120] *De An.*, II, X, 422*a*.

[121] *De An.*, II, 7, 418*a*–419*b*, 2.

[122] *De Sensu*, 2, 438*a*, 2–438*b*, 16.

of none of the properties it assumes but potentially of all of them.[123]

Furthermore, these potentialities must be nicely balanced. The centre of gravity must lie in the middle of the series, not at the extremes. Too great a capacity in the eye for becoming and seeing black would impair its capacity for becoming and seeing white. Again, qualities become perceptible only when they are actualized a little more or a little less in the object than they are in the sense-organ. Water at blood heat feels neither hot nor cold. Its temperature, to be felt, must differ from that of the hand, or rather of the heart. If sensation is to take place, the state of the perceiving body must always occupy a mean position in any qualitative scale. Upset this balance, strain by too strong an external impression the capacity for becoming actual inherent in the organ, and you damage or destroy the structure. Too bright a light blinds, too loud a sound deafens. Too heavy a touch will even kill the entire organism.[124]

Aristotle investigates at length and in detail the constitution of the various sense organs. But as his conclusions were faulty and contained few flashes of prophecy we need not concern ourselves with them. We will rather pass at once to the further development of his psychology. Our different sensations, as we have seen, are actualized and located in the appropriate sense-organ, sights in the eye, sounds in the ear, smells in the nose, tastes and touch perceptions in the heart. Even the remembering and picturing of a sensation is done by the organ by which it is perceived. Yet, notwithstanding their apparently solitary confinement in separate and isolated cells, the senses somehow manage to communicate. In the first place they are aware of each other's existence and perceive that their several fields of sensation are distinct. We perceive that sounds are different from sights or tastes.[125] But on the other hand, not only do the different sense-organs often have their fingers in the same pie—witness the fact that certain properties of an exter-

123 *De An.*, II, 1, 647*a*, 2 ff.
124 *De An.*, II, 12, 424*a*, 26 ff.; III, 13, 435*b*, 15 ff.
125 *De An.*, III, 2, 426*b*, 12 ff.

nal body, such as motion, rest, form, and magnitude, called by Aristotle "common sensibles," are perceived by more than one sense—[126] but they can also pool their hodge-podge of sights, sounds, and the like, sort them out, couple them up, and refer them to the same external object.[127] Sugar for example strikes the eye as white, the tongue as sweet. The two qualities are quite unlike and are actualized in different parts of the perceiving body. And yet we somehow perceive that the two qualities overlap and that what appears white is the same as what appears sweet.

Finally, one sense may poach upon another's preserve and perceive qualities properly apprehended by some other organ.[128] Sugar strikes not only the tongue but the eye as sweet. Food already *looks* toothsome as it lies upon the plate. In another way, too, the senses display this peculiar clairvoyance. My eye, to use Aristotle's own illustration, may light upon a blond youth. All that my eye can be really said to perceive is that he is fair, and yet by a kind of second sight I may also "see" that he is Mr. So and So's son.[129] We, of course, should invoke memory and the association of ideas to explain this apparent extension of a sense beyond its proper limits, but Aristotle regards it as incidental to sensation itself, and calls the associated ideas "accidental sensibles."[130]

In Aristotle's opinion, all this goes to show that despite their seeming independence and finality the five senses are after all only different avenues through which a single faculty of sensation operates. It may be, indeed, the individual sense-organ that does the perceiving of its particular kind of data. Consciousness of sights may be located in the eye, of sounds in the ear, of smells in the nose, of tastes and touches in the heart. But although it has five distinct seats, it is one and the same consciousness living in all of them.[131] It is this "common

126 *De An.*, II, 6, 418*a*, 17 ff.; III, 1, 425*a*, 15 ff. *De Sensu*, 1, 437*a*, 9 ff., 442*b*, 5 ff. *De Mem.*, 1, 450*a*, 9 ff.

127 *Cf.* Zeller, *op. cit.*, II, p. 67, n. 2.

128 *De An.*, III, 1, 425*a*, 22–425*b*, 7.

129 *De An.*, III, 1, 425*a*, 22 ff. *Cf.* II, 418*a*, 21 ff.

130 *De An.*, *ibid.*

131 *Cf.* Ross, *op. cit.*, p. 140.

sense," [132] as Aristotle calls it, that brings the different fields of sense-perception to a single focus, and combines what would otherwise be five disconnected sets of data into one and the same world. It accounts for our awareness of both "common" and "accidental" sensibles, for our power to distinguish and to compare our sensations, and for our ability to attribute the reports of our different senses, in spite of their diversity, to a single source.[133]

The fact that the separate senses are so many ways of exercising one of the same faculty of sensation is further proved by the fact that when we fall asleep all our senses lapse. This common unconsciousness must originate in a common sense, since obviously any one of the special senses can be rendered unconscious, as when we are blinded or deafened, without affecting the other senses or putting a stop to consciousness in general.[134]

Again, the fact that perception makes mistakes shows that there is more to sensation than just the five senses. For we can never be in error so far as our immediate experiences are concerned. Whatever sensations we have, we have; what we feel, we feel; and that is all there is to it. But the common and incidental sensibles often turn out to be not what they seem. The report of one sense regarding, let us say, size or shape may be given the lie by the evidence of another, though each of the conflicting data is true and ultimate for the sense that perceives it. A cavity in a tooth for example is as actually and uncontrovertibly big to the tongue as it is small to the eye. So, too, if I have the perception of a blond youth there can be no doubt or error regarding the nature of my perception. But I may be in error in perceiving at the same time that the youth is Mr. So and So's son, or even in perceiving that he is an external object. For I may be not only near-sighted but dreaming and delirious. Erroneous impressions of this sort presuppose, then, in addition to the

132 *De An.*, III, 1, 425*a*, 27 ff. *De Mem.*, 1, 450*a*, 10 ff. *De Somno*, 2, 455*a*, 15 ff. *Part. An.*, IV, 10, 686*a*, 31.

133 *Cf.* Ross, *op. cit., loc. cit.*

134 *De Somno*, 2, 455*a*–455*b*.

five senses which present data as given facts, a common sense which checks these data up and frequently does so incorrectly.[135]

There is one other characteristic of sensation that can be explained only on the hypothesis of a "common sense." This is the self-conscious quality of all our perceptions, or, in other words, the fact that not only are we aware of sights, sounds, smells, tastes, and touches, but we are also aware of that awareness. This perceiving that we perceive must be the work either of the sense-organs with which we are familiar or of some extra sense and additional organ. The latter alternative we may rule out at once, since the extra sense would be self-conscious like the others, and its self-consciousness would come from still another sense, and so on indefinitely. We should be caught in an endless repetition of perceiving that we perceive that we perceive. Moreover, every sensible quality would be the object of at least two senses instead of one—the sense that perceived it immediately and the extra sense that perceived the perceiving of it. But certainly colors are not directly perceived by anything but the eye, so far as we know, or sounds by anything but the ear.

We are, therefore, forced to conclude that the awareness of perceiving takes place in the organ that perceives. But this awareness can scarcely belong to the specific function of the organ. It cannot be part of seeing or hearing. For all that we see is sights, all that we hear is sounds. Perceiving that we see, however, is most certainly not a visual sensation, nor is there any audible quality to perceiving that we hear. When we are aware that we are looking or listening, we are not seeing double what we see, or hearing a tale told twice. If, then, the sense-organs themselves are conscious of their own activities, they must be so by virtue of exercising, in addition to their particular functions, an activity of perception in general. Only by granting the existence of such a faculty can we understand how *perceiving* that we hear need not involve *hearing* that we hear, as it would if the ear were an organ merely of

[135] *De Somno,* 2, 460*b,* 3 ff.–3. *Cf. De An.,* III, 3, 427*a,* 15 ff.; Ross, *op. cit.,* pp. 142, 147–148. Zeller, *op. cit.,* II, p. 69.

audition and not also of a common sense.[136] To the question of the self-consciousness of the processes of thought and reasoning we shall come in a moment.

The main office of the common sense is, Aristotle believes, to be found in the heart.[137] This, as we have already noted, is the organ in which taste and touch qualities are actualized. Just how the faculty of general perception keeps in touch with its branch offices in the eye, nose, and ear is not clearly explained.[138] There is some, but by no means conclusive, evidence that he supposed the blood to carry messages between them.[139] And again he seems to imagine a connection by means of pneumatic tubes running to the heart from the organs situated in the head.[140] That the brain has anything to do with sensation —another Platonic error[141] in his opinion—he denies outright.[142]

As we have seen, the sensible qualities actualized in the sense-organs when the latter are in contact with appropriate stimuli linger on in the organs after the contact is broken.[143] These faded pictures form the content of what Aristotle calls phantasy, or, as we might translate it, imagination. The bulk of these pictures exist only potentially so far as consciousness is concerned, like old photographs, we might say, shut up in an album only a leaf or two of which is visible at a time. But, to continue the figure—which naturally is not Aristotle's, but our own invention—our mental activities are always fingering the album and turning the leaves over, sometimes idly and at random, sometimes in definite ways and with a set purpose. For example, in sleep and, as we should to-day add, in day-dreaming, when the control of actual perceptions is removed, the leaves of the album flop aimlessly about disclosing their

136 *Cf.* Ross, *op. cit.*, p. 141. *Cf. De An.*, III, 2, 425*b*, 12 ff. *De Somno*, 2, 455*a*, 12 ff.

137 *De Juvent.*, 1, 467*b*, 28 ff., 3, 469*a*, 10 ff. *De Vita*, 469*a*, 4 ff. *De Resp.*, 478*b*, 33 ff. *Part. An.*, III, 4, 666*a*, 14 ff. *Gen. An.*, VI, 1, 781*a*, 20 ff.

138 *Cf.* Zeller, *op. cit.*, II, pp. 66 ff.

139 *Cf.* Zeller, *ibid.*, p. 67, n. 1; Taylor, *Aristotle*, p. 67.

140 *Gen. An.*, V, 1, 781*a*, 20 ff.

141 *Timaeus*, 67 B, 76 D.

142 *Part. An.*, II, 10, 656*a*, 15 ff.

143 *Cf. supra*, p. 104.

images in sequences and combinations that not only are fantastic and grotesque but also are mistaken by the dreamer for actual, present experiences.[144] But when we are awake, in addition to being conscious of the presence of the image we follow it *back* to the sensible impression in which it originated. In so doing we are aware that we are not dealing with an immediate perception of something going on at the moment, but with a relic of something that is dead and gone. In other words, our experience means to us a *memory* of the *past*. This ability to perceive in the present a past event, which is the characteristic feature of memory, is, Aristotle thinks, incidental to our perception of time and is to be attributed to the common sense.

We should also note that in certain passages Aristotle seems to confer upon the imagination the power ordinarily attributed to the common sense of perceiving the "common sensibles," or qualities reported by more than one sense, and of recognizing the incidental references of sensation, such as our perception that our blond friend is also the son of Mr. So and So. And the errors into which we fall in interpreting these reports and making these references are laid in the same passages at the door of phantasy rather than of sensation itself.[145] But this extension of the sphere of the imagination at the expense of the common sense appears to be a passing incident rather than a definite bent in the career of the Aristotelian psychology.

Let us return from this brief digression and look once more at the images referred to the past which we call memories. We see at once that these images differ from one another in their behavior. Some of them float by almost as idly as dreams, with no apparent why or wherefore. Others present themselves only after a deliberate effort on our part to recall them which is frequently painful and exhausting. We rack our brains, as we say, to remember this or that. Memory thus consciously employed and directed is given by Aristotle the special title of *recollection*. Moreover, the memories that lack conscious guidance are not all of them haphazard. Many of them

144 For Aristotle on dreams, *cf. De Somno* 1–3.

145 *De An.*, III, 3, 428*b*, 18 ff. *Cf.* Ross, *op. cit.*, pp. 142–143.

tend to associate themselves in our minds according to fixed rules, and exhibit an order in their sequence. The memory of a certain event or thing is, for example, likely to call up pictures of similar or of sharply contrasted incidents or objects, or of occurrences that took place near by, or immediately before or after, the occurrence in question. Such trains of imagery, though not deliberate, appear to be subject to some sort of unconscious direction, and are therefore also to be called recollections rather than mere memories. For that matter, our conscious efforts to recollect are most successful when they follow the lead of the unconscious laws of association.[146] Because of its orderly character the procedure of recollection verges on reasoning, and because of its quasi-rational character probably exists in no other animal than man.[147]

There remains one more aspect of life and sensation to be investigated before we are done with the subject. An object endowed with these activities is generally able to move about in space under its own steam. It does not have to be set in motion by the pull or push of other objects. Moreover, its movements are not haphazard. It has a way of always proceeding towards some things, and even of appearing to seek them out, and of avoiding and retreating from others. We have then to ask what its motive power is, and why it behaves as it does.[148]

The answer to this question Aristotle finds in the fact that sensation is not neutral in value, but pleasurable or painful, and that the pictures it leaves behind are correspondingly pleasant or unpleasant. We simply find ourselves *liking* certain experiences and *disliking* others. But pleasure and pain, or like and dislike, are not merely impressions that the organism passively enjoys or suffers; they are also essentially incitements to action. Sensation reacts to them with the same immediacy as it feels them. And once more we find ourselves just travelling towards the one and away from the other. Given, moreover, memory and imagination, we can picture satisfactions or sufferings not yet directly at hand. These,

146 On recollection as distinguished from memory, *cf. De Mem.*, 2.
147 *Ibid.*, 453*a*, 6 ff. *Hist. An.*, I, 1, 488*b*, 25.
148 *Cf. De An.*, III, 9, 432*b*, 7 ff.

also, attract or repel us, and impel us to move towards or away from them. But we are now consciously *wanting* and pursuing what we imagine will bring us pleasure, and consciously not wanting and seeking to avoid what we imagine to be a source of pain. This consciousness of wanting is *desire*, and the thing or situation that we picture as allaying our want is the object of desire. Without desire, and unless it were definitely focussed, the movements of the organism would display no purpose.[149]

The machinery of animal movement is now plain. The prime mover is an object of desire, whose rôle in the process is merely to be potentially pleasurable and attractive. When such an object comes into contact with the organism, this pleasure-giving and therefore desirable characteristic is actualized in it along with its other sensible qualities. But, according to the Aristotelian theory, in the act of sensation the sense-organ itself takes on, we remember, the same qualities as appear in the object and turns red, or sweet, or loud, or whatever other quality is felt. In the presence, then, of an object that in contact with the organism turns attractive, the heart (the organ of the imagination and the common sense) will turn wistful and feel desire. And finally, the qualification of the heart by desire incites it (for that is what being qualified by desire means) to push and pull the joints and limbs in such a way that the organism makes the movements necessary to the pursuit of the object.[150]

This emergence of desire as the motive power of animal movement complicates the psychological problem for Aristotle. For at first glance desire cannot be regarded as an essential characteristic of any of the three recognized faculties of the soul. It is not indigenous to either the nutritive or the sensitive soul, since all plants and many of the lower forms of animal life seem to lack it. At least, they are powerless to make the movements of pursuit or avoidance associated with it. Moreover, it is frequently checked, or controlled and directed, by the intervention of reason. At the same time, desire cannot be said to

[149] For Aristotle on the psychology of desire, *cf. De An.*, III, 9–10.
[150] *Cf.* Ross, *op. cit.*, p. 145.

be a distinguishing characteristic of the rational soul, for reason is often a neutral and dispassionate looker-on at life, devoid of any impulse to initiate or to direct action. It begins, then, to seem as if desire and the source of motion were lodged in some further faculty, and as if the soul travelled on four legs instead of three.[151]

This, however, Aristotle will not allow. Desire after all is bound up with imagination, for without imagination it cannot exist. It and the movements to which it incites are therefore products of the sense-activities. In many cases the play of imagination and desire will be governed entirely by sensual considerations, in which case we have mere appetite. But some desirable images may commend themselves to reason more than others, and may therefore picture a more fundamental or "higher" object of desire. The desires inspired by such objects constitute our real or rational wish for ourselves, and may be pitted, often successfully, against the desires engendered by less "rational" objects. Of course, it would be a counsel of perfection to suppose that they were always victorious, and we therefore frequently find a kind of see-saw in which now rational desire, now appetite, is uppermost. This intervention of reason, however, does not dislodge desire from its position as an activity of the sensitive soul. For without imagination and mental pictures representing desirable objects we could not have even rational desire and the reasonable movement or behavior consequent upon it. So the soul goes on three legs, after all.[152]

We have now completed another stage in our hunt for an unmoved mover, and may well pause for a moment to gather up our results and estimate their value. Our first impression may well be one of disappointment. Plainly the sensitive soul displays none of the characteristics of the self-sustained and self-contained activity of which we are in search. Sensation depends upon the body for its existence, and upon the presence of external objects for its content. If we are to see, there must be both an eye and something visible; if we are to hear, there must be both an ear and something capable of making

151 *Cf. De An.*, III, 9.

152 *Cf. De An.*, III, 10, 433*b*, 29 ff.

sounds. Furthermore, sensible experience cannot digest and organize itself. It takes the reflective activity of reason to do that. Sensation, when all is said and done, is food for thought, and is chiefly valuable for the nourishment and the opportunity to function that it affords faculties higher than itself.

Nevertheless our study of the sensitive soul has given us two important clues. In the first place, our investigation of *desire* has shown us how it is possible for an unmoved mover to impart motion without itself moving or being moved. An object of desire can set things going without pushing or pulling them, or exerting itself in any way, and without undergoing any change in its own essence. For example, a beautiful young girl may walk along a crowded street. She may have no flirtatious intention, no wish to attract. Indeed, her eyes may be modestly cast down upon the pavement, and she may be so wrapt in her own pure thoughts that she is wholly oblivious, not only to the behavior of the passers-by, but to the very existence of any one except herself. And yet she may cause thousands of heads to turn and necks to crane as she goes on her maidenly, self-centred, self-occupied way. In like manner, without exerting or expending any force, and unmoved, unchanged, unconcerned with and unconscious of the commotion it excited, some supreme object of the world's desire might be causing the very heavens to turn round. Conversely the crystalline sphere of the outer stars might revolve ceaselessly from "whence" to "whither," simply because it was in love, and the terrestrial elements might tend to move in straight lines to their appointed places just from homesickness. In them appetite, conscious in living and sensitive matter, might operate unconsciously as an intervening moved mover, and transform the motionless attraction of the Unmoved Mover into terms of locomotion. The problem, then, of how to give potency and effect to a cause that neither pushes, nor pulls, nor creates, nor wills, nor anywhere or in any way touches space and time, is solved.

The second clue turned up by our investigation is this. We have discovered that frequently the activities of reason are not actuated by desire or directed towards any goal outside them-

selves, but spontaneously and completely fulfil their nature by simply looking on at life. In other words, we have found a form of activity that does not want *to do* anything or *to change* anything, and that is perfectly content with things as they are and with itself as it is. In following up this clue we have still several steps to take, and must proceed carefully. But one most significant point is already clear. Because an unmoved mover cannot by definition feel desire, or wish, or will, it does not therefore have to be conceived as unconscious. The fact that those activities of consciousness we call rational may have no desires or purposes proves that.

Moreover, the point has a further implication. We cannot, of course, think of an unmoved mover as a sentient or sentimental being, since sensible experience, apart from other deficiencies, is dyed in the wool with desire. But some experience, as we now know, reaches beyond sensation and sentiment, and in those higher reaches of meditation we find it washed clean of desire, an impassive spectator of what goes on. Such thought is not, to be sure, also purified of imagery, for although it is a mere spectator it is still a looker-on at *events*. But since we can cleanse consciousness of desire, may we not also find some form that is devoid of the other characteristics of sensation as well, and that is not aware of any passing show at all? At least, the possibility and the hope of such a discovery have dawned upon us. Let us now explore the rational soul, where alone they can be realized.

## CHAPTER VI

## THE APPROACH TO THE UNMOVED MOVER

The power of rational thought, Aristotle feels, is confined among the animals to man alone. The other animals, to be sure, show many human traits, and even exhibit qualities scarcely distinguishable from wisdom and knowledge. Indeed, as we have already seen, some of them attain a degree of mental development that puts them on a level with children. Hence the transition from animal to specifically human consciousness shows no marked break or jump.[1] Still, there is a point beyond which animal intelligence does not go and the child does proceed. My dog, for instance, knows me and the other members of my family and displays great sagacity in his dealings with us. He has his images, his memories, and his loves of each one of us. But, according to Aristotle, he is unable to generalize these images, and see in them the universal human Form or type of which they are examples. We are not distinctively *human* as distinguished from some other kinds of being. We are just Tom, Dick, and Harry, separate objects in which he apprehends no common nature. But when I myself perceive and deal with members of any family, I am aware not only of their particular existences, but also of a clan or type to which they belong. To me their images are more than colored photographs of a Tom and a Dick and a Harry; they are X-ray photographs, as it were, revealing behind the separate outer appearances of Tom, Dick, and Harry one and the same formal structure. In other words, to me sensation and imagery suggest something that they do not to my dog—a logical definition, or essence, or Form. They introduce things not only by the first names or nicknames by which animals know them, but by family names as well, which tell me what they are and where to look them up in a cosmic "Who's Who."

[1] *Cf. supra,* p. 100.

Just, then, as it is the characteristic function of the sensitive soul to suck the sensible qualities or forms out of objects, so it is the function of the rational soul to extract from them their logical forms or essences.[2] Sensation presents us with miscellaneous individual items, thought with the universal Forms those items embody. Our perceptions are of individual men, our reasons comprehend mankind.

Aristotle's description of the process of knowledge closely parallels that of perception. The illustration of the wax tablet is again employed.[3] The rational, like the sensible, wax is potentially all the impressions it can receive. Or, better still, reason is a kind of space or place in which any and all of the Forms may be inscribed and in which therefore they exist potentially.[4] These impressions are actualized and this "place" becomes formally "laid out" with universal concepts, when the mind comes in contact with the real natures and logical essences of things.

Again, in rational activity we may detect something analogous to the distinction between the particular senses and the common sense. There are two sorts of thought. In the first place, just as the senses cannot analyze or get behind the ultimate data of perception such as colors, tastes, sounds, and the like, but have to accept them as simply *there*, so, too, the mind finds itself confronted with Forms that cannot be further analyzed but simply have to be taken for what they are. These Forms are the final, indivisible species into which more comprehensive classes or genera can be broken up. Thus we may divide the Form or genus "animal" into different species of animals, but with the Form of man or of horse we touch rock-bottom in our subdivision. Further analysis reveals no new essence or nature, but only qualities that are merely incidental and make no difference to human or equine nature as such. A man is a man, whatever be his colour, race, or creed.

Moreover, the wider, divisible classes or Forms have also an indivisible and final aspect if we choose to dwell upon it. For instance, the concept or Form of "animal" becomes ultimate

2 *De An.*, III, 4, 429*a*, 15 ff.
3 *Ibid.*, 429*b*, 29 ff.
4 *Ibid.*, 429*a*, 27.

and irreducible if we concentrate our attention upon what-it-is-to-be-an-animal, and pay no heed for the time being to lions and tigers except in so far as they exhibit the characteristics of animals in general. The definition of a living being is not a sum of the definitions of all the things that possess life. It is simple and uncompounded, just itself and nothing else.[5]

Or take an example from the realm of pure quantity. Any quantity is of course divisible, if we choose to think of it as such. A line has two halves, or three thirds, or four quarters, and so on *ad infinitum.* But we can, if we so desire, neglect the question of its divisibility when we think of it, and can grasp it as an indivisible unit. In conceiving it, we do not have to conceive first its halves. If we did, we should find ourselves thinking of two lines, not of one. We apprehend it immediately as a single, individual whole. We are also able to exclude from our thought of it the ideas of breadth or thickness and to define it in terms of length alone. In other words, we regard the line as indivisible lengthwise as well as crosswise. The concept of a point is a blank denial of possibility of further division, just as the notions of evil or blackness are negative concepts of the utter absence of good or whiteness.[6] For the purposes of thought then, some Forms must, and all Forms may, be treated as incapable of further analysis. That is, they may be looked upon as indivisible units, each one of which is held in isolation and strictly confined within a definition applicable to it alone. When they are so regarded, they are not "thought over" or "thought out" by the mind. They are just *there,* present to the mind all at once in their entirety, and they are recognized in a single indivisible act of thought for what they are. If, for instance, I think an object to be a cat or a dog, or even to be the remains of a tyrannosaurus or a pithecanthropus erectus, the concept does not stroll into my mental vista letter by letter, or syllable by syllable. There may, indeed, be a preliminary hesitation during which I am, as it were, spelling out what the object means. But if I do finally

[5] *De An.,* III, 6, 430*b,* 5 ff. *Cf.* Hicks's ed., Notes, pp. 510–511, 515–516.

[6] *Cf. De An.,* Hicks's ed., Notes, p. 522.

get its meaning, its full nature comes upon me all at once, and I read it as a single word.

This suddenness with which concepts or Forms are present in their entirety to the mind Aristotle expresses by saying that we think them in an indivisible instant of time.[7] Any length of time, of course, like any length of space, is capable of further division. And our thinking goes on in time, and takes time. But just as we do not think of the halves into which the line may be divided, when we conceive the line as such, so, too, the moment in which we grasp the nature or definition of a line does not seem to us to be broken up or long drawn out into smaller moments. Our apprehension of truth is instantaneous so far as we are concerned. For that matter, we could not grasp or intuit a Form as an indivisible whole unless we grasped all of it simultaneously, and without awareness of taking any time to do so. So long as we are conscious of steps, and moments, and a lapse of time in our thinking, we have not yet grasped the nature of an object, but are still trying to find out what its nature is. But, as we saw in the last paragraph, when that discovery and that knowledge do burst upon us, and the nature or Form in question is at last revealed to us, they are not inserted into our minds, however swiftly, like a slide into a magic lantern, *first* one end and *afterwards* the rest. They flash upon it in their completeness all at the *same* time, as a scene or a caption flashes upon a moving picture screen.

We may remember that in the immediate perception of sensible qualities no question of truth and error could arise. If the eye saw red, or the ear heard loud, or the tongue tasted sweet, it simply did so, and that was all there was to it. I might, to be sure, make a mistake in referring the sensations I had to external objects, as in a dream or a fever, or in the identification of my visual impression of blondness with Mr. So-and-So's son. But these mistakes did not affect the fact that the sense-organs perceived what they perceived, and therefore such errors had to be attributed to some further activity of sensation in general, called by Aristotle the common sense.

[7] *De An.*, III, 6, 430*b*, 6 ff. *Cf.* Hicks's ed., Notes, pp. 515–517.

The same is true of intellectual error. There can be no question of truth or falsehood so far as the direct awareness of Forms by the mind is concerned. If the intellect really is contemplating the definition of the triangle, or the nature of the lion, or what-it-is-to-be-a-man, that Form is present to it, and there can be no argument in the matter. But, unfortunately for our peace of mind, our human intellects cannot simply sit still and intuit the truth. The Forms with which the mind deals are presented to it not all nicely fitted into one another like a solved picture-puzzle, but piecemeal and in confusion. The mind then has the task of finding out where they belong, and of putting them together so that they present a coherent scheme of things; just as it falls to the common sense to place properly and to interrelate sensible data.[8] This kind of thinking, which is always running about gathering up and piecing together fragments of the whole, we may call "discursive" or "synthetic" thought. And here it is, in joining together the different Forms and in making propositions and hazarding judgments about where they belong and how they are related, that we begin to make mistakes and false statements. For example, I may know what commensurability is, and what the circumference and the diameter of a circle are, but any proposition bent on squaring the circle by combining these three perfectly good Forms is far from good itself.

Moreover, this "synthetic," combining sort of thinking is further complicated and exposed to error by the necessity imposed upon the human mind of taking the existence of a sensible world into all its calculations. Plato had been unwilling to accept such a necessity, and had sought to avoid it.[9] But Aristotle regards it as the inevitable and natural consequence of the association of the human intellect with a physical organism. After all, the operation of our human minds presupposes the existence of the sensitive soul, just as sensation can only be exercised by a body already possessed of life. To think, then, we must perceive, just as to perceive we must live. Even our profoundest meditations cannot wholly forget the lowly conditions in which they are cradled. We never, as Aristotle em-

[8] *Cf.* Ross, *op. cit.*, pp. 147–148.

[9] *Cf.* Ross, *op. cit.*, p. 148.

phatically states, think without images.[10] Complete abstraction is impossible to us. If we think of a pure quality, a concrete embodiment of that quality floats before our eyes. If we try to conceive quantity in general, we cannot help also imagining a definite quantity of some sort. And time casts its shadow over our contemplation of the eternal. The triumphant Platonic flight of dialectic to the Ideas, unaided by even the colorless diagrams of mathematics, cannot take place. All human thought whatsoever is in the case of the geometer, who, without needing figures of a definite size to explain his meaning, must always draw such figures in working out his problems.[11]

But thought that is about sensible objects and involves imagery must always contain an incalculable and irrational factor. A Form to be sure, must needs be what it is and nothing else. In grasping it we grasp a necessary truth. If we know what the nature or definition of man is, we know it. But sensible objects, being infected with Matter and Potentiality, *need* not be what they are and have the Forms they have. The bronze that has been cast into a statue might in other circumstances just as well have been made into a door. And the statue in other contingencies might just as well have been made out of marble. Furthermore, sensible things are clusters or combinations of various Forms, and it is frequently hard to say offhand which Form defines the essential nature of the object, and which is merely an attribute and accident. I may have absolute *knowledge*, for instance, of the features that *necessarily* distinguish the human and the simian types. But I may unearth a skeleton, or even discover a living animal, that is not immediately and necessarily an example of either Form and that defies me to *know* what it is. It may be essentially a man endowed with ape-like attributes, or essentially an ape with incidental human characteristics. I incline perhaps to one interpretation rather than the other, but I cannot be sure.

So it is that in dealing with sensible objects there is always a possibility of error and an element of uncertainty. There is no *reason*, logically speaking, why they should not be other than

10 *De An.*, III, 7, 431*a*, 16–17; 431*b*, 2; 432*a*, 12–13; *De Mem.*, I, 449*a*, 30.
11 *De Mem.*, I, 450*a*, 1 ff.

they seem, and hence their real natures and the real relations between the different characteristics they present are not *necessarily* given at first sight. In reflecting upon them as they appear both in fact and fancy, I must be wary of saying boldly "I know," and must content myself with quavering "I believe," or "I am of the opinion that." Of course, my belief may be true, and I must feel it to be so if I am to hold it. But it only *happens* to be correct, and for aught I really *know* it may be false. So long as this possibility casts its shadow upon my thinking I dwell in the valley of indecision and opinion. Out of this valley much of our human reasoning never climbs. For knowledge can emerge from opinion only when I feel that my proposition is *necessarily* true, or, in other words, when I am convinced that the Form or the relation between Forms I have in mind is not only possibly but *actually* the nature of the object or of the situation under examination. At last, I say, I have grasped something that cannot be other than it is. But often before I can say that, I must go through a long and difficult mental process of "reasoning out" the situation with which I am confronted.[12]

Into thinking and reasoning of this sort, moreover, the time element enters and brings further confusion.[13] Thought has to deal with the past and the future as well as with the present, and we must be able to figure out not only what is, but what was and what will be true. Our problem, then, in seeking to grasp the system of Forms that organizes the universe is not so much to solve a picture puzzle as it is to find the patterns in a kaleidoscope. No wonder that in these circumstances intellectual uncertainty and error loom so large in human calculations.

Indeed, so bewildered, so dependent upon the senses, and so lacking in self-sufficiency is our intelligence that any hopes we may have had of finding in the rational part of the soul some hint of the nature of the Unmoved Mover seem already doomed. Certainly here is little trace of a self-existent, self-justified activity, little for the world to fall in love with, little to set all

[12] For Aristotle on "opinion" *cf. Posterior Analytics*, I, 33; *De An.*, III, 3, 428*a*, 20 ff.; Zeller, *op. cit.*, pp. 163 ff., II, p. 106; Ross, *op. cit.*, p. 49.
[13] *De An.*, III, 6 430*a*, 31 ff.

things moving by the sheer appeal of its perfection. Reason, we might feel, is no steadier or surer than sensation. The two parts of the soul are, rather, in the same boat, are rocked upon the same waves of becoming, and steer the same erratic course.

Still, just as second thought discovered unexpected clues to the Unmoved Mover in the sensitive soul, so a further consideration of what is implied in the operations of reason will show us that we have really made important progress, and in fact that we are nearly at our journey's end.[14] If we will but look more closely we shall see that a tremendous and all-important difference between the rational and the sensitive parts of the soul has declared itself. Sensation actualizes a capacity inherent in a *body* for being affected in restricted ways (the *sense-organs*) by *some* of the *physical* qualities of other *individual* bodies. And the sense-organs, even when they are asleep and inactive, and exist as mere capacities for sensation, still have a material structure and substratum of their own. The eye, for example, does not cease to exist as a physical organ when it is closed. The intellect, on the other hand, in its potential state is, we may remember, a capacity for receiving and becoming, not particular sensible qualities and images, but universal concepts and abstract and incorporeal natures like a chemical formula, or the laws of motion, or the definition of a triangle. But evidently, anything that is corporeal cannot be conceived as turning into something that is incorporeal. A physical thing can become circular or equal to another, but it cannot become equality or circularity as thought can, and as thought does when it assumes the Form in question. Hence the intellectual capacity for taking on Form cannot be a physical disposition or structure of the body, like hot or cold, or the eye or the ear. There can be no special organ of thought as there are organs of the special senses. And, Aristotle adds, ignorant, we note once more, of the function of the brain, "as a matter of fact thought has none." Furthermore, if the intellect had a bodily organ, we should expect thought to be exhausted or even destroyed by too great stimulation, as the senses are. But the

[14] For a study of the Aristotelian doctrine of the intellect *cf.* Hicks's edition of the *De Anima,* Introduction, pp. lviii ff.

sensitiveness of intellectual activity is not diminished but increased by intense thinking.[15]

Our power to think, then, is not, like our capacity for perceiving, a power the body develops itself. It is true that this power would not be at hand in us unless we were also living, perceiving organisms. Nevertheless, it cannot be attributed to or identified with anything in our bodily make-up.[16] But in that case how are we to regard it? What is there to the mind's eye when that eye is closed? Aristotle's answer is short and sharp. The intellect, he tells us "is nothing at all actually before it thinks," [17] or, we might add, when it stops thinking. When the mind's eye is closed, the eye simply is not there. The moment the mental lid is shut, there is a vacant socket behind it. For there is no thing, no organ, no substratum into which thinking can relapse when inoperative.

The analogy then of the blank wax tablet is too gross to apply to the potential intellect. Wax has an actual composition of its own, as the sense organs have, apart from the impressions it receives and before it receives them. The best simile we can find is, after all, that of empty space. So it is that we have already seen Aristotle [18] hastening to supplement the analogy of the wax, and to inform us that the capacity for thought is best described as "a place of forms and ideas," [19] where the Forms are present potentially, just as all possible geometrical figures exist potentially in empty space awaiting actualization. For a "place" before there is anything in it, or a space that is not "laid out" in some form or other, is not a body or a thing or a substratum, and has no structure or nature of its own. It, too, is actually nothing at all, and yet it can be inscribed with and take on all sorts of forms.

But not only is the intellect "nothing at all actually before it thinks"; when it does think it is nothing at all *actually* except *what* it thinks. In the act of thought it assumes no Form of its own in addition to and different from the Forms it enter-

[15] *De An.*, III, 4, 429*a*, 10 ff. *Cf.* Hicks's ed., Note, p. 474.
[16] *Cf.* Rolfes, *op. cit.*, p. 34.
[17] *De An.*, III, 4, 429*b*, 24.
[18] *Cf. supra*, p. 119.
[19] *De An.*, III, 4, 429*a*, 27–28.

tains. All there is to thinking is that which is being thought. If there were anything more to it, and if the mind had a Form or nature of its own apart from the concepts that occupy it, such a Form would stand between it and its objects and hinder and obstruct the vision of truth.[20] It would act as a kind of window pane through which the truth had to be viewed, and would reveal the truth, not stark naked, as it really is, but veiled, no matter how diaphanously, by the intervening glass, and seen as the character of this mental glass dictated. However transparent the nature of the glass might be, it would intrude an alien something into the scene, which did not belong there. We have only to open the best-washed window to feel the difference between even the cleanest pane and none at all. The intellect, having no Form of its own, is wide open to truth. It is nothing but the Forms it assumes, just as unwindowed space, when filled with scenery, is nothing but the scene it displays. Being completely "taken up" with the Forms it takes on, it is indistinguishable from them.

But besides holding that all there is to the intellect is the Forms it entertains, Aristotle also believes that all there is to the Form is wholly present in the mind when we are thinking it. Herein, again, thought differs from sensation. When I *perceive* an individual man, my perception does not take him all in. There is a lot of him left over outside me and outside my perception of him. Indeed, I *perceive* only accidental attributes, but never his essence. But when I *conceive* and *know* what human nature really is, all there is to know about human nature is comprised in my thought and knowledge. The whole truth, the essence of the matter, what-human-nature-really-is, is wholly present within my intellectual "place of forms." From the side of the Forms, then, as from that of the intellect, the identity of Form and intellect in the act of knowledge is complete.

A difficulty, however, occurs at this point to our modern way of thinking. Is not your intellect a different intellect from mine, and do we not both conceive things like the definition of the triangle or the law of gravitation intermittently? But, if our minds are different, how can the Forms your mind takes on

20 *De An.*, III, 4, 429*a*, 20 ff.

be the same as mine becomes, even when we are thinking the same truth? If you and I, for example, are in perfect agreement at the same moment upon the definition of the triangle, our concepts will indeed be similar, but how can they be the *same?* There will be two concepts, two versions or copies of the truth in question, just as when we both look at an apple your sensation "red" is not my sensation "red," however much these perceptions may resemble each other.

To Aristotle, happy in the Greek freedom from the problems of "individuality," "personality," the "ego," and the like, which so complicate modern philosophy, this difficulty did not occur. But we may guess how he would have answered it. Our sensations, he would probably have said, are only similar but not identical because they are qualities assumed by our bodies rather than Forms assumed by our minds. Our bodies, being made of different matters, are different and separated from one another, and, being made of a changeable substratum, change and differ in themselves from moment to moment. That is why your sensation "red" is not my sensation "red" when we both are looking at the same apple, and why your pain is not my pain after we have halved and eaten the apple, however much my pain may feel like yours. Conceiving and thinking, however, have no material substratum to be different in you and me, and thus to create distinct and separate *rational* souls in us both as it creates different vegetative and sensitive ones. Thinking and knowing are not attributes or functions of any underlying soul-substance or thinking subject, of which there can be a number. The rational part of the soul, then, is essentially the same in us both, not essentially different like the sensitive and vegetative parts associated with separate bodies and therefore with different living and feeling subjects.

It follows that the Forms known by reason are the same Forms, wherever reason happens to be located. Although the image you perceive with your particular sensitive soul is only *like* the "image" I perceive with mine, the general idea or definition conceived by our joint and identical rational soul is the *same, identical* definition for us both. In the same way, the sensations I have to-day are only similar to those I had yester-

day or shall have to-morrow, because the perceiving part of the soul goes on in time, and grows older and changes with the body. But the concept of yesterday is the same as that of to-day or to-morrow, since it forms and constitutes a part of the soul that, having no corporeal substratum, is not subject to time and change.[21]

Nor in this connection did Aristotle bother about the question of "consciousness" as something apart from its data—a question which suggests to us the existence of something behind our thoughts that does the thinking. In the sensitive soul, we may remember, perception was nothing but the sense-organ becoming the quality perceived. My awareness or consciousness of red was simply the reddening of the eye.[22] In like manner, we may believe, the awareness or consciousness of a Form was for Aristotle simply the intellect assuming that Form, and becoming circularity or equality or what-it-is-to-be-a-man. Or better still, in view of the substitution of "place" for wax as a metaphysical description of the potential intellect, and in view of the assertion that the intellect when thinking is nothing but the thought it thinks, consciousness of a thought or Form would be merely the *presence* of the thought or Form in question.

Such a view of the "consciousness" of the rational part of the soul is also implied in the little Aristotle has to say about its self-consciousness. The mind's knowledge of itself, which accompanies its thinking, does not in any way set the mind over against its thoughts, or endow it with a Form or "self" of its own distinct from the other Forms it thinks. The intellect does not know itself as one among the many objects knowable to it. Nor does the fact that its self-consciousness is knowledge of mind turn its object into mind.[23] For the intellect in knowing itself can only know the Forms constituting that self. And over and above those Forms there is no self, no intellect for it to know. "For where the objects are immaterial that which thinks and that which is thought are identical. (Speculative knowledge and its object are identical.)" Or, as we might also put it, just knowing that we know gives us no further informa-

21 *Cf.* Zeller, *op. cit.*, II, pp. 99–100.

22 *Cf.* Ross, *op. cit.*, p. 137.

23 *De An.*, III, 4, 429*b*, 22 ff.

tion about *what* we know. It adds no new item to those already at hand, and does not extend our knowledge one iota.[24]

Finally, Aristotle might have suggested that the reason we are different individual thinkers as well as different vegetative and sensitive souls, lies in the fact that human thought is tinctured and adulterated with images. Every Form we conceive we have willy-nilly to picture. Now, images are bound up with the sensitive part of the soul, which is a function and expression of the body. And our bodies are separate and distinct because they possess Matter, the principle of individuation, whose surplus of potentiality over actuality keeps every Form, except God's, constantly reiterated in an attempt to realize it completely in a single concrete instance of itself. Imagination, then, being a function of matter, will be as individualistic and multiple as the individual sensitized bodies and sensitive souls in which it appears. Consequently, each one of us will have his different, particular way of *picturing* the single, identical truth that the universal reason, common to us all, is conceiving in us in the same way.

This is not the whole story, however. We are not only picturing, we are *thinking* in images. Our imaginings are not vain. Truths are enmeshed in them. But so far as truth is enmeshed in imagery, it, too, will appear multiple, as a concept reduplicated in many individual minds. In short, not only will the same Form, so far as it is pictured by you and me, look like two distinct images perceived by two individual perceivers; it will also look like two separate *thoughts* entertained by two separate thinkers. The definition or Form of the triangle, for example, will be blended with one set of images in your total awareness of it, and with another in mine. Therefore *the* definition of the triangle will also be *my* definition and *your* definition. If, however, the Forms, whose presence constitute intellect and knowledge in us both, could be purified of the imagery that divides and multiplies them and makes them "personal matters" for us, then the literally "imaginary" distinction between mine and thine in our *thought* would disappear. In the vision of truth there would be "no more of thee and me" and we should

[24] *De An.*, III, 4, 429*b*, 22 ff.; Ross, *op. cit.*, p. 147.

simply have one and the same set of Forms thinking itself in a single, indivisible, impersonal act of intellection. For the distinctively rational part of your soul and my soul is nothing but the thinking of Form, not by you or me, but by itself.[25]

Incredibly perplexing and remote from everyday life as this may seem at the first blush, it, or something that suggests it, is a matter of common and frequent experience. If you and I are working out a difficult problem together, we both of us tend, as we say, to become more and more "absorbed" by it. And as we become absorbed in and by the thought that occupies our minds to the exclusion of all else, our awareness of our separate selves, and indeed of any self at all, is forced out to the very edge of consciousness, where it hangs on as a mere fringe of vague sensation and imagery. From our thinking and reflecting it has disappeared almost altogether, since they are wholly taken up, save for an inattentive and almost "unconscious" noting of this fringe, with the problem that engages them. To all intents and purposes we have both of us become simply the thing in which we are so interested and of which we are so full. So far, then, as we exercise our purely intellectual activities we do tend to turn impersonal, to lose sight of our separate individualities, and to become indiscernible from one another and from the truth we are contemplating.

In spite, then, of our earlier pessimism, we can now see that our intellectual activity does carry us far beyond the point at which the sensitive soul reaches its limit and lets us drop. Indeed, it verges on being a principle with both the source and the justification of its existence within itself, such as might fitly cap the climax of the universe and inspire all things to aspire towards its perfection. And it could perhaps demand consideration for the position of Unmoved Mover, were it not for the potential element in it, which definitely disqualifies it for the post. This remnant of Potentiality not only betrays itself in our "*trains* of thought" and our processes of "reasoning out," where one concept is arrived at through another and one conclusion provides the material for the next; the cloven hoof is also displayed in the intermittent character of those supreme

[25] *Cf.* Ross, *op. cit.*, p. 151.

moments in which we finally apprehend the truth. At one instant the truth, the Form that explains and satisfies, is there and our mind is nothing but its presence; at the next our attention flags, we forget, the *mot juste* has escaped us, the truth is no longer there, and the rational part of the soul is nothing but its absence. No unmoved mover can seesaw like that.

This potential element, moreover, cannot be laid wholly to the association of reason with the sensitive and vegetative parts of the soul. It is true of course that we human beings could not possess the capacity for thought unless we had bodies and senses. And to this extent the sensitive and vegetative souls make possible the possibility of intellectual activity, and may be held ultimately responsible for the fitful and intermittent actualizing of that activity in us.[26] Nevertheless, the reason that the vision does not last, and that the instant of complete union with the truth is not made eternity for us, is only indirectly due to the weakness of the flesh or of sense. It is an internal complaint of the spirit itself. For obviously the potential factor must itself be *intellect*, since, as we have seen, the intellect cannot be made of anything except itself. The potential intellect, then, must be within the rational soul, and part and parcel of it.[27]

Can this malady of the spirit be cured? It must be before we can say that the spirit is a God. Let us see how Aristotle treats the case.

In the first place, he assures us, it is only natural that the human intellect should suffer in this way. It is the common lot of all natural processes to be a passage from the potential to the actual, and human thinking is a natural process. We should, then, expect to find in the intellect the same distinction between Matter and Form that we find elsewhere throughout the universe.[28] Or if we prefer to think of our reasoning as a kind of art, there, too, we find a Form, already once and for all

26 *Cf.* Ross, *op. cit.*, p. 151.

27 *Cf.* Adamson, *Development of Greek Philosophy*, p. 219.

28 For Aristotle on the passive and the active intellect *cf. De An.*, III, 5. *Cf.* also Hicks's edition, Introduction, pp. lxiv–lxix; Zeller, *op. cit.*, pp. 97 ff.; Ross, *op. cit.*, pp. 148 ff. My own discussion is based on Ross's interpretation.

present to the artist, slowly developing and producing itself in material of some sort. In whatever way we regard it, clearly the mind like everything else has *to become* the Forms that constitute its essence.

But now, if we look at the symptoms more closely, we shall see that the intellect suffers from a far lighter case of potentiality than that which afflicts the rest of Nature. In the productions of Nature and of art Form is developed in a material of different character from itself, and the transition from potentiality to actuality involves a real change of quality, save in the pure locomotion of the heavenly bodies. Fodder becomes a horse, bronze becomes a statue. But in intellectual productivity—in the artist's apprehension in his own mind of the Form of the statue, for example—the transition from the Form that it is possible for him to think to the Form he ends by actually thinking, does not involve any change in the Form itself. His mind may indeed range through and actualize a series of Forms, before he lights on the one that suits him. But each Form, as it occurs to him, is suddenly *there*, all ready made, simply what it is and nothing else, made out of nothing else and convertible into nothing else. So, too, in following up a train of thought we proceed not by an unbroken, inclined ramp, but by separate steps, upon each one of which our minds rest in a state of definite, though it may be tentative, conclusion. The successive concepts we entertain do not *turn into* one another. One idea merely *replaces* another in our intellectual "place of ideas." The problem may be difficult, and its solution may involve the trial and rejection of many different Forms. But each new Form is given complete in a sudden spurt of intuition, and is discarded with equal suddenness and thoroughness.

The Forms, then, that are evoked and actualized by intellectual activity are fabricated out of nothing but their own absence. And when intellectual activity is suspended in moments of inattention or forgetfulness, the Forms relapse into no other Forms of being but simply into their own absence. This absence, we need scarcely point out, does not involve a cessation of sense and imagery as well. The moments, or perhaps we should

rather say, the stretches when we are not reasoning are not moments of unconsciousness. The rational soul may snore peacefully while the sensitive soul is wide-awake. The lapse of intellectual activity means merely that the logical concepts in which knowledge becomes actual have ceased to occupy us.

Furthermore, the absence of these Forms which constitute truth and knowledge must not be taken to imply their annihilation. When a Form pops into mind it is not created out of nothing. Nor when it pops out of mind does it pop out of existence. It exists as a possible concept both before and after it is actually entertained in thought. It goes on being enacted in the physical world, irrespective of whether or not it is conceived by us. And the thing it gives form to is the potentiality of some other thing. But in its rôle of a possible object of thought a Form is not also an actual "something else," as the possible statue is also actual marble or bronze. As matter for thought it has no nature except the nature that thought formulates. The laws of motion, for example, or the definition of a circle, or the Form of man, when they are out of mind and constitute potential knowledge have the same character as that which actual knowledge presents. They do not suffer alteration in the act of being understood, as bronze is altered into something more and other than itself in the act of being made into a statue, or as the child is changed in the process of growing into a man. The play of knowledge in the mind is rather a kind of mental locomotion, movement to and from a "place," and its potential aspect is not unlike the capacity for "whence and whither" that still dogs the heavenly bodies, which, like the Forms, are incapable of alteration. Or we might compare the difference between potential and actual knowledge to the difference between visibility and invisibility. The successive acts of understanding in which ideas come and go are like the abrupt illumination and obliteration of a scene when lightning flashes in the dead of night. The darkness out of which the scene springs contains it as a possible vision, and contains it, already and only, in the form in which it will become actual. But as an actual vision it remains nothing at all, and the darkness is a mere "place" to the mind's eye, until the flash occurs.

So it is that the distinction between the potential or, as Aristotle now calls it, the *passive*, intellect and the actual or *active* intellect is not a distinction of nature, like that which subsists between marble and the statue or between the qualities that go to make a good football team and the team itself. On the contrary, in the intellect the potential, material element has lost every vestige of positive being different from the actual, and is purely negative. Unlike all other potentialities it has no maiden name, no name of its own different from the name of its actuality, which is changed by its marriage. It cannot be called something else, as the potentiality of a statue can. It can only be called "intellect." And the actualizing of this potential intellect and the formulating of this mental matter no longer involve the *transformation* of an alien substance from below. They consist solely in bursts of *information* from above. The difference between the potential and the actual has in the rational part of the soul been reduced literally to a vanishing point.

We can now appreciate the full significance of Aristotle's insistence that the intellect is actually nothing at all before it thinks, and of his substitution of the simile of "place" for that of wax in describing its potential, material state. His words mean that Nature, by the time she has grown to the stature of the potential intellect, has almost outgrown of herself the taint of Potentiality and cured herself of Matter. Indeed, her intellectual fluctuations can scarcely be described as successive recoveries from and relapses into any positive disease. They are rather the ups and downs of a convalescence verging upon perfect health. To make her entirely well, and to secure a Form of being wholly free from every trace of Matter and Potentiality, we have only to stop this nervous twitching of the mind's eye which is its sole remaining weakness. This we may effect by reassuring the intellect that even the fitful moments of vision it enjoys in us are explicable only on the hypothesis that it is really all the time one with the whole system of Forms, and that it has merely to wake up to this fact in order to be the whole truth and nothing but the truth. For instilling this confidence one more dose of our familiar house-

hold remedy, the principle of the priority of the actual, is indicated.

We are already well acquainted with the working of this principle,[29] and can predict the effect of its application to the intellect. So long as a thing is merely *possible*, there is a chance of something else, or at least of nothing at all occurring. The marble that is the possible statue may be made into a vase instead, or it may continue to lie uncut. In the case of the potential intellect, of course, nothing other than intellect can be made of it, but there is always the possibility that it will not be actualized and will remain purely negative. Since our knowledge and the Forms that constitute it are intermittent in their presence and incomplete in their presentation, they may at any moment absent themselves definitely and completely. Why then do they present themselves at all? The mere possibility of their occurring is always counter-balanced and negated by the equal possibility of their non-occurrence, and therefore cannot account for their being here in us. To tip the scales in favor of becoming actual rather than of remaining potential an extra weight from the outside is necessary. In the case of a block of marble the Form of the statue or the Form of the vase might, either one of them, supply the weight, because marble is naturally fickle and polygamous, and is capable of taking on both of them. But since the strait-laced, essentially monogamous potential intellect is capable of becoming actual intellect alone, an actual, already existent intellect alone can stir and actualize it.

Therefore, beside the potential or passive intellect "which becomes all things," there must also be, says Aristotle, an active intellect "which creates all things." [30] The act of creation by which the active intellect incites the passive to exercise its capacity for knowledge, and to apprehend and become Form, he describes with two different similes. He likens it both to the moulding of a material by an artist, and to the turning of potential into actual color by the coming of light. The latter figure was perhaps suggested to him by the analogy drawn by Plato between the action of the sun in the

[29] *Cf. supra*, p. 57 ff.

[30] *De An.*, III, 5.

world of sense and that of the Idea of the Good in the world of Ideas.[31]

In applying these analogies we should remember that the active intellect, unlike the human artist, is nothing but the Form it has in mind. It, its mind, and the Form it has in mind are all identical in its act of knowledge. And the material upon which it works is nothing but its own absence. Hence its mode of giving Form to this material is simply an activity of making itself present. In the same way, light, when it comes, makes objects, heretofore invisible, visible to the eye. But what is light except the visibility of objects, or, to put it intellectually, the actual apprehension of Form? And what is the mind's eye? It has no substratum, no structure, no Form of its own as the physical eye has. When it is open, it is nothing but the visibility or apprehension of Forms. When it is closed, it is nothing but their absence. Once more, then, as the light of reason flashes and truth becomes visible, we have simply the fact that Form is not merely enacted in physical objects but is also present in the universe in the way that we call "Mind."

The question of the active and the passive intellect is one of the most difficult that confronts Aristotelian scholars, and has provoked a great variety of opinion with respect to Aristotle's real meaning.[32] Perhaps our safest course would be to say that Aristotle was never clear on the point in his own mind, and to let it go at that. But before adopting such a counsel of despair, a little more can be said that does not strain his all too brief discussion, and that may serve to sum up the matter.

Given the priority of the actual over the potential, we may say, the possibility of knowledge presupposes that there is such a thing as knowledge, just as the "statuable" capacity of bronze and marble presupposes the existence of such a thing as a statue which they may become. Now all Forms are equally intelligible, and are therefore equally capable of constituting by their presence the rational part of the soul. Hence the entire system of Forms must be really known by us, and the whole body of

31 *Cf.* Ross, *op. cit.*, p. 150.

32 For an account of these opinions *cf.* Hicks's ed., *De Anima*, pp. lxiv–lxix; Adamson, *op. cit.*, pp. 249–254; Webb, Studies in the History of Natural Theology, pp. 264–273.

truth and knowledge must somehow be there in us in its completeness, all the time. If we did not really know everything, we could not possibly know anything. The "real presence" in us of this eternal and all-comprehending act of knowledge, which is one with its object and is identical in every individual, constitutes our active intellect.

There is nothing in the nature of this act itself that can limit or interrupt it. It is intrinsically as easy to understand all things as one thing, and to understand at one time as at another. Reason *qua* reason "does not at one time function and at another not." In a superhuman being this possibility of knowing all at once all there is to know might be completely realized and converted into actuality. If it were, the possibility of the opposite—of not becoming as well as of becoming—which lurks in all potentiality would be completely excluded from such a being. More specifically, the potentiality of *not* always knowing the whole truth, betrayed by sporadic and fragmentary knowledge, would be entirely ousted by the complete actualization of the possibility of knowing it all, and we should have a mind altogether free from the potential element.

We human beings, however, are physical objects, endowed with bodies, senses, and individualities. Hence in us this counterbalancing possibility is not ousted, but presents itself along with the complete and unified system of Forms, or body of knowledge, that constitutes the active intellect. The result is that in human beings the single, all-inclusive act of understanding the whole truth is forever negated by the possibility of not knowing and of not being known, and appears as individual minds in which "linked" argument "long drawn out" is interspersed with flashes of intuition. We are victims of the power to turn the light off as well as on, to forget as well as to remember. Consequently the moments in which the Forms are known are always offset by moments in which they are merely knowable. So it is that, although generally speaking potential knowledge is not prior in time to actual knowledge, it is so in the case of the individual.[33] The perpetual light of the active intellect is there from the beginning, but we are creatures in

[33] *Cf. De An.*, III, 5.

whom "the light shineth in the darkness; and the darkness comprehended it not." In the moments, however, when the darkness does comprehend it and is dissipated by it, we for a brief space exercise the power to become as God.[34]

This power, it will be noted, is implied in the possibility of not thinking and not knowing. For it is a poor rule that does not work both ways, and since all potentiality is by definition double faced, the one alternative cannot exist without the other. We could not turn the light on if we could not also turn it off. It follows that the very condition that renders the complete exercise of thought impossible to us is also the very condition that enables us to think at all. In any being, then, short of God, the active intellect can no more function, and thought can no more exist, without a potential or passive intellect, than the potential intellect can function and thought take place without an active intellect. Nothing possessed of any trace of potentiality can think unless it has them both.[35]

But now, the possibility of not thinking, which is a symptom of the invasion of the intellect by the principle of Potentiality and Matter, is associated with the presence of the body and the senses. If we had no body and no vegetative or sensitive soul, there would be no intermission or incompleteness in the activity of the active reason within us. In that case, however, we should not be *we*. We should be neither human nor individual beings. Conversely, the *possibility* of thinking involved in the *possibility* of not-thinking, must also depend upon the existence of a physical organism. Abolish that organism, and the one *capacity* disappears with the other.

The passive intellect, then, without which human beings cannot think, is perishable,[36] and does not survive the death of the body. It disappears along with loving and hating and memory,[37] imagery, sensation, and physical life, and with it goes discursive thought and all *process* of reasoning.[38] All that is left

34 *Cf. Met.*, XII, 7, 1072*b*, 14 ff.

35 *Cf.* the ambiguous sentence at the end of *De An.*, III, 5, and also Ross, *op. cit.*, p. 152, on its possible meanings.

36 *De An.*, III, 5, end.

37 *De An.*, I, also IV, 408*b*, 24 ff.

38 *Ibid.*

is the active reason, which, being free from potentiality of any sort, is *capable* neither of not-thinking nor of thinking, but simply *is* thought. This alone is universal, impassible, separable from the body,[39] immortal and eternal. But in that single all-comprehending timeless act of knowledge nothing of *us* is left. Although the truth does not cease to be true when, in the natural course of generation and decay, it ceases to appear in our bodies as mind, *we*, no longer catching its radiance, cease to be minds, and not only our vegetative and sensitive, but our individual rational souls pass out of existence. When the day of creation is at its height, the mountain tops, climbing at last above the darkness that engulfs their base, are touched for a while with light. The sunset comes, and, carried despite their splendor in the motion common to all things of earth, they are swallowed up in the night from which they rise. But the sun is still there, shining on other mountain ranges in distant lands and transforming their peaks also into momentary semblances of itself.

This doctrine is certainly very different from that of the *Eudemus* when Aristotle, still a young man, was seeking consolation for the loss of the friend who fell fighting in Dion's expedition against Syracuse. There, as we may remember, the tone and the arguments of Plato's *Phaedo* are re-echoed, and we find every evidence of a lively belief in personal immortality. But here, in the impersonal eternity of the active reason, Aristotle has reached a point where such belief, if he retained it at all, was on its last legs. Indeed, it is an open question whether the doctrine of the active reason is Aristotle's final word, and whether he did not end by abandoning immortality of any sort. It has been maintained that the separable active reason was a kind of vanishing after-image of the Platonic period in Aristotle's thought, and that the third book of the *De Anima* is earlier than Books I and II, in which the more naturalistic and scientific thesis of the soul's dependence upon the body is emphasized. In that case the views expressed in these books would represent his final opinion on the subject.[40]

[39] *De An.*, III, 5.

[40] *Cf.* Jaeger, *op. cit.*, pp. 355 ff.

## CHAPTER VII

## THE DISCOVERY OF THE UNMOVED MOVER

The active reason must be asked one more question, and that a most important one, before we can dismiss it from our discussion. Is it or is it not to be identified with God? The answer, we might expect, should be affirmative. Certainly, the active reason would seem to possess all the qualifications necessary to an unmoved mover. It is self-existent and self-justified. Its being depends upon nothing outside itself, and it needs nothing beyond itself to fulfill and perfect it. It is absolute Actuality without any taint of Potentiality. And the brief moments in which it reveals itself in us are moments in which we attain our sovereign good and supreme felicity. When we are caught up and rapt away in them, we are admitted to the same kind of knowledge as God enjoys, even if we are not actually made one with him.[1] The active reason, then, is a form of being whose sheer perfection might well cause the whole universe to fall in love with it and to behave itself accordingly. Whatever the other objects of Nature's affections may be, they inspire merely temporary affairs in which she finds no rest and beyond which she immediately passes. But here, in this perfect Form, she should find her true beloved.

That Aristotle did make a God of the active reason was, moreover, the opinion of his disciple Eudemus. To be sure, the Academy as a whole emphasized the naturalistic and scientific side of the Aristotelian teaching and inclined to a materialistic psychology in which the active reason quickly fell into obscurity. But Eudemus' opinion was re-echoed by the great commentator, Alexander of Aphrodisias, whom we ought perhaps to have mentioned in outlining the vicissitudes suffered by Aristotle's writings. And that view has been held and defended by many scholars ancient and modern.

[1] *Cf.* Webb, *op. cit.*, p. 273.

Still, it is not an easy view to reconcile with what Aristotle has to say about God. If the active reason is God, then our reasons must be regarded as fragments or sparks of the divine intellect, and our moments of intuition, when our minds are one with truth, must be conceived as akin to those moments of ecstasy, preached by the mystics, in which the soul actually becomes and is God. If Aristotle had believed this, we should expect some explicit affirmation of so important a doctrine. But we have none. His nearest approach to it is a statement that the moments in which we apprehend the truth are like the life that God lives eternally.[2] But this is qualified by the remark that, marvellous as such a life would be, the divine life is even better than that which the active reason confers on us—a state of existence even more wonderful.[3] To be sure, the view that God is immanent in us seems to be supported by passages in which Aristotle tries to figure how the universe can have its good both outside and inside itself. In this respect, he tells us, the universe is like an army, which contains its good both as something apart from itself in the person of the general who commands and disciplines it, and as something within itself in the prevalence of discipline and order.[4] We cannot be sure, however, that this good in either aspect is to be identified with God,[5] and if it is, we have a supplementary declaration to the effect that the transcendent is much more important than the immanent aspect. Generally speaking, too, the passage is more than counterbalanced by a tendency to regard God as essentially a being outside the natural order.

Furthermore, approaching the question from the side of knowledge, Aristotle would seem to consider the divine mind a highly specialized and pre-eminent instance of active reason. The active reason, apparently, comprehends and is identical with the whole system of Forms. But any Form except the divine Form, any nature except the divine nature, is, we are told, unworthy of the divine contemplation.[6] The inference is that God is not only unaware of the existence of the sensible world,

[2] *Met.*, XII, 1072*b*, 14 ff.
[3] *Met., loc. cit.*, 1, 22 ff.
[4] *Met.*, XII, 10, 1075*a*, 11 ff.
[5] *Cf.* Ross, *op. cit.*, p. 185.
[6] *Met.*, XII, 9, 1074*b*, 15 ff.

but is also without knowledge of the world of Forms. He knows only himself.[7]

But if the active reason is not God, what is it? And if God is not the active reason, what is this divine nature to which his knowledge is confined? The first question has been answered by the supposition that Aristotle regarded the active reason as a form of being intermediary between the human and the divine intellect. At the hands of the Arabian commentator Averrhoes this supposition was expanded into a multiplicity and hierarchy of reasons, culminating in an impersonal active reason, participation in which gives knowledge of God and union with him. And in one form or another this theory of the active reason as a mediator has found favor also with many modern interpreters.[8]

The second question, Aristotle himself answers somewhat as follows. In any exhibition of active reason, there is complete identity between the knower and the known. The divine nature, which is perfect intellect and knowledge, is nothing but what it thinks.[9] There can be in it no unrealized residuum of capacity for thought, for in that case its thought might grow weary and flag.[10] Moreover, were there potentiality, there would be change, and any change in a thought already one with "that which is most divine and most precious . . . would be change for the worse." Again, looking at the matter from another angle, any potentiality in the divine thought could not be actualized in anything inferior or superior to itself. For thinking about anything inferior would be unworthy of a divine intellect, and would derogate from its perfection; and thinking about anything superior to the highest and the best—which God is by definition—would be a contradiction in terms.[11]

Now the nature of thought is determined by the object of thought. Thinking emptied of its objects is nothing. The nature, for example, of the thought of the human Form or of the

[7] For a discussion of these difficulties *cf.* Zeller, *op. cit.*, I, pp. 397 ff.; Ross, *op. cit.*, pp. 182 ff.

[8] *Cf.* Webb, *op. cit.*, p. 272; Ross, *op. cit.*, p. 153.

[9] *Met.*, XII, 9, 1074*b*, 25 ff.

[10] *Ibid.*, 1074*b*, 35 ff.

[11] *Ibid.*, 1074*b*, 15 ff.

definition of the triangle is no more and no less than that Form or definition and is nothing else. The nature of God's thought, then, cannot be determined by any Form except his own. For if other Forms helped constitute his knowledge, his thought and his nature would not be simple but composite.[12] And if he thought of Forms different from his own, he would of necessity be thinking of something inferior to himself. The divine intellect, then, which is the quintessence of thought, can only deal with "that which is best in the fullest sense," or in other words with itself.[13]

But if we take away the system of Forms which makes up the body of truth and knowledge and the active intellect, will there be anything left as a matter of fact to constitute the divine self? Shall we not have completely emptied the divine nature? Will not a God of this sort be really thinking about nothing and in the condition of one asleep?[14] We would seem to be cornered between the devil and the deep sea.

In struggling with this difficulty, Aristotle apparently deviates somewhat from the teaching in the *De Anima*. There, we may remember, he insisted that the intellect had no Form of its own apart from the system of Forms it entertained, and that the self of which it was also conscious in thinking the Forms was nothing but those Forms.[15] Here, however, we come upon an exception to the rule. In us, the consciousness of the fact that we are thinking accompanies the consciousness of some further fact that we are thinking about. In the divine mind, this further fact is not necessary, and the fact that he is thinking—not about this, that, or the other Form, but about just thinking—constitutes the self of which God is conscious, and to which his consciousness is confined. He can know what knowing is, without being also distracted by the multiform character of what is known. This pure activity of knowing, uncomplicated by the presence of any further Form, is the object of the divine knowledge and the Form that constitutes the divine intellect. In God, Aristotle concludes, "it must be itself that thought thinks

12 *Cf. Met.*, XII, 9, 1075*a*, 6 ff.
13 *Met.*, XII, 7, 1072*b*, 18 ff.
14 *Met.*, XII, 9, 1074*b*, 15 ff.
15 *Cf. supra*, pp. 126–127, 129–130.

(since it is the most excellent of all things) and its thinking is thinking on thinking." [16]

Our long search is now at an end. The Unmoved Mover, the final cause that "produces motion by being loved," [17] which we have hunted so long up and down the universe, has at last been found. The discovery is proclaimed with enthusiasm in a paragraph of comparative splendor, written in a manner unusually grand for Aristotle. "On such a principle," he intones, "depend the heavens and the world of nature. And its life is such as the best which we enjoy, and enjoy for but a short time. For it is ever in this state (which we cannot be), since its actuality is also pleasure (and therefore are waking, perception, and thinking most pleasant, and hopes and memories are so because of their reference to these). . . . If then God is always in that good state in which we sometimes are, this compels our wonder; and if in a better state, this compels it yet more. And God *is* in a better state. And life also belongs to God, for the actuality of thought is life, and God is that actuality; and God's essential actuality is life most good and eternal. We say therefore that God is a living being, eternal, most good, so that life and duration continuous and eternal belong to God; for this *is* God." [18]

Phrases like these, however, fine as they were, could not conceal the weaknesses of such a theology. Philosophically considered, many immediate difficulties presented themselves. It was all very well to say that God was just thinking about thinking, but the question persisted—thinking about thinking *what?* With the best will in the world one could not very well make a feast of reason unless one had something to chew other than one's own chewing. Moreover, waiving this difficulty and supposing that a divine mind could exist hermetically sealed from knowledge of all Forms and essences save its own, such a being and such knowledge could only be described, like the supreme reality of the mystics, in purely negative terms. It would be nothing that any category of our experience could fit. At the same time, being nominally still rational, it would lack the positive, super-rational and ineffable character that supposedly

[16] *Met.*, XII, 9, 1074*b*, 32 ff.
[17] *Met.*, XII, 7, 1072*b*, 3.
[18] *Met.*, XII, 7, 1072*b*, 12 ff.

makes Nirvana or the Plotinian "One" more than compensate for the negation of everything we can understand or hold dear.

To get round this difficulty and to give to this ruminating upon rumination some sort of intellectual cud that would not at the same time confuse the divine with the active intellect, St. Thomas Aquinas thought out a brilliant scheme. In our exercise of the active intellect we are conscious primarily of the Forms that constitute our knowledge, and only secondarily of the activity of knowing in itself. In the divine intellect it is just the opposite. God knows himself first, and the self that he knows is the pure act of knowledge, as Aristotle maintained. But in knowing that self, he also knows *incidentally* all the other objects of knowledge, and thus escapes the absolute seclusion to which Aristotle had retired him.

Many other commentators, medieval and modern, adopted this device.[19] But it is a sound criticism rather than a safe interpretation of Aristotle's views, or at the most it is an attempt to pull the chestnuts out of the fire for him. It is probably safer to leave the doctrine as he states it and not attempt emendations.[20]

The theory of the hermetically sealed God, as critics have also pointed out, affects not only the divine mind but the divine power, and makes it difficult to conceive him as filling the all-important part of Unmoved Mover. The most serious and disqualifying charge is that, if the Unmoved Mover is so shut away from the universe as to be totally unaware of its existence, it is difficult to see how the universe can be in any way aware of God, not to speak of being thrilled and moved by the appeal of his perfection. Aristotle, to be sure, tries to establish some sort of quasi-physical contact between God and the outer heaven, and almost goes so far as to "locate" him outside the universe.[21] But this tends to increase confusion rather than clearness. Finally, supposing that the world could be brought within the range of God's attraction, it would still be a question whether the love of the world for God and the

19 *Cf.* Ross, *op. cit., loc. cit.;* Zeller, *op. cit.,* I, p. 402, n. 1, also pp. 413 ff.
20 *Cf.* Ross, *op. cit., loc. cit.;* Zeller, *op. cit., loc. cit.*
21 *Cf.* Zeller, *op. cit.,* pp. 407 ff.

universal yearning of the potential to become actual ought not to be regarded as the real efficient cause of motion. If so, the efficient cause would be divorced from the formal and the final causes and would ally itself with Matter.

On religious grounds, also, Aristotle's theology has been severely taken to task. We must admit that his God is, to say the least, an austere object of worship. Regarded merely as an ideal and as a beloved whom one is content to adore at a distance, such a being can with difficulty be conceived as moving the world's heart or even its head. For it is not easy to dismiss sensation and passion and emotion and their attendant pleasures from the picture of a divine experience, and it is still harder to leave out of it the omniscience for which the human intellect yearns. Our normal vision of God must, then, go largely blind, if we are to see in the divine life as Aristotle describes it an adequate portrait of that "life pleasantest and best" which we feel a truly desirable God should lead.

Incidentally, the Epicureans, whose Gods may perhaps be regarded as the most legitimate heirs of the Aristotelian deity, tried to correct these defects. Their Gods inherited the consummate ease of his life, and were even more completely retired from active participation in the affairs of the world. They were freed not merely from efficient causation but from final causation as well. They did not so much as influence by attraction a universe now conceived as mechanical in its workings. Not only were they unmoved, they were not even movers. In short, the tangle of the moral and the scientific in Aristotle's thought was deftly unsnarled, and the true office of God in a mechanical order—that of intimating that a happy and perfected life can be lived in a mechanism—was revealed and clarified.

At the same time, now that they were altogether freed from the bondage of scientific duties, the Epicurean Gods could realize more completely than their parent the blessings of a perfected life, and could display a greater lavishness of moral excellence. They applied their increased patrimony to uses of which Aristotle would not allow its founder even to dream—to feasting and laughter and living for life's sake and to all

else that enriches and embellishes human existence. And so, in the perpetual calm of the interstellar spaces which they inhabited, "far beyond the flaming ramparts of the world," they enjoyed a life more consistent with our ideal of what perfected life, "pleasantest and best," would be.

The function of God in religious experience is not exhausted, however, by his dramatization of the ideal of attained perfection after which we strive in vain. The worship, just for its own sake and without thought of grace or favor in return, of such a perfection lifted clear of all the evil and sorrow and suffering of the world may indeed be, as Spinoza intimated, the highest and most unselfish act of which the human soul is capable. And in Greece the nobler aspects of the established cult had tended to become an uplifting of the heart towards the vision of a happy, deathless, and untroubled life, which held and sustained its worshippers by the love of its sheer goodness and beauty. The Olympian Gods did the better part of their work as unmoved movers.

But the fact remains that perfection, however attractive the vision of it may be, is far from being realized in the universe, and seems quite beyond our reach unless the Gods come to our rescue. The world in which we live is in constant need of salvage and repair, and our own struggles and miseries, being beyond human aid, require supernatural comforting and cure. The religious value of any God will lie, then, largely in the reciprocal interest he shows in us, our affairs, and our needs. He must be not only an unmoved mover untouched by imperfections, but a moved mover as well, stirred by compassion for the weakness and the misery of the finite creature, and bestirring himself actively in our behalf. This of course introduces a self-contradiction into the idea of God, which defies intelligence though it does not disturb the religious instinct. In Greece the need of a redemptive deity who shared our sufferings and even our death partially unfolded itself in the Eleusinian and the Orphic mysteries. And, thanks to the flexibility of a polytheistic system, the Greeks were able to avoid the inherent contradiction by assigning the redemptive function to other Gods than those who lived the serene Olympian

life. In Christianity the demand came to its full flower in the preaching of a divine being who was not only worthy of being loved and worshipped by the world as its transcendent sovereign good, but himself so loved the world that to save it he deliberately willed to lay down his life for it. Here the paradox of a perfect being tasting to the last drop the bitterness of imperfection was countered, less successfully, perhaps, by the doctrine of a Trinity of persons within the Godhead, one of whom took upon himself the work of salvation, while another on the whole preserved, though not altogether consistently, the untroubled, perfected character of the divine existence.

So far as the redemptive side of the idea of God is concerned, the Aristotelian deity must of course be definitely counted out of the picture. Apart from the fact that if he experienced emotion he would not be unmoved, he could scarcely be expected to have any feeling for a world of the existence of whose sensible and particular aspects, including individual human beings, he was certainly unaware, and even of whose purely formal and intelligible structure he was probably without knowledge. To a God of this sort we can look for no act of self-sacrifice. Nor can we expect from him any providential direction of human or mundane affairs, any administration of justice, any proportionment of reward to merit. As a matter of fact all such concepts are signally absent from Aristotle's theology.[22] Indeed, his God cannot be described as personal, or as self-conscious in more than the most formal way, or in any sense of the word that means anything to us.[23]

In these circumstances it may seem peculiar that the medieval Church, after some backing and filling, finally accepted Aristotle as her official "guide, philosopher and friend"; especially as she had rejected Plato because she suspected him of holding unsound views about the resurrection of the body.[24] That she apparently preferred a man who did not even believe in personal immortality or in a personal God was due largely to the good offices of the Arabian go-betweens who had made the match. She knew her Aristotle mostly through Latin

[22] *Cf.* Ross, *op. cit.*, pp. 183 ff.
[23] *Cf.* Zeller, *op. cit.*, I, pp. 399 ff.
[24] *Cf.* Taylor, *op. cit.*, p. 50.

translations of Arabic translations of the original Greek, which at the time she had not the interest, the learning, or the means to verify.[25] And her knowledge was further garbled by glosses and interpretations that presented him as a possible and even a desirable *parti*. The discovery of the true character of the man for whom she had thrown over Plato, and with whom she had been living for some three hundred years in happy if somewhat sinful ignorance, was one of the annoyances to which she was subjected by the revelations of the Renaissance.[26]

All this criticism of Aristotle from the point of view of the philosophy of religion, though sound enough, is not altogether fair. For the mature Aristotle was not a particularly religious man, and the God he preached was not a particularly religious God. Aristotle was pre-eminently a scientist, and his theology drew but a minor part of its inspiration from moral and emotional needs. In fact, his theology was not at heart a theology at all, as we understand the term. It was an extension of his physics, oriented almost entirely by the necessities of astronomy and mechanics. He had to find a first cause of motion, or in other words an unmoved mover, such as would explain, not only the initial revolution of the outer heaven through which astronomical movement is communicated to the rest of the universe, but also all the other phases of that actualization of the potential in which the essential nature of motion consists. He probably cared little or nothing about the religious values of this cause, provided it fulfilled his scientific requirements. And it was in a sense an accident that the Unmoved Mover turned out to be an intellect of sorts and to live a life to which moral categories like "good" and "pleasantest and best" could be applied; although of course, in another way, this followed logically enough from the teleological nature of the Aristotelian astronomy and physics.

In any case his deduction of the existence and the character of his God was strictly scientific in intention. His theory that

[25] *Cf.* Sandys, *Hist. of Classical Scholarship,* 2nd ed., I, ch. XXX, pp. 561 ff.

[26] *Cf.* Sandys, *op. cit.,* II, pp. 109 ff.

movement must be eventually imparted by final causation, and that God moves the world as the beloved moves the lover, has, to be sure, been stigmatized as a relapse into the "poetic metaphors" of which he accused Plato.[27] But the metaphor certainly hits a truth that the less poetic arguments of more avowed theologians frequently miss. Aristotle saw clearly the only conditions under which a cause of motion can consistently and logically be called "first" and "unmoved." The general difficulty of conceiving a first cause as efficient and creative was spotted unerringly by the little girl who asked, "But, mother, who made God?"—a question that dogs unceasingly the so-called cosmological arguments for the existence of a deity. More specifically, a true *first* cause cannot cause mechanically by pushing or pulling, for whatever can shove can also be shoved, and so on *ad infinitum.* Nor can it create by *fiat,* since in that case it is moved by desire, and the object of desire becomes the real and the first cause of its creative movement. Given, then, the necessity of a first cause of motion, Aristotle was admirably scientific in his description of the way in which it operated. Indeed the only logical alternative to his position would seem to be the materialistic and mechanical hypothesis that the existence of motion requires no explanation, but must be regarded as an ultimate and primary fact behind which we cannot go.

Again, once having seen that any really first cause of motion can move by attraction only, Aristotle worked out in a perfectly scientific manner what the nature of such a cause must be like. Here his way was smoothed by his anthropocentric view of the universe and by his doctrine of the actual and the potential. And conversely, this doctrine, and his ability to express it in a hierarchy of existence culminating in man, received in their turn confirmation from the results of his reasoning. Obviously he must locate somewhere a form of existence that was wholly free not only from physical but from psychological disturbance or conditioning of any sort. He must find an activity that reached neither backward nor forward for its support, that could be made out of nothing but itself and made

[27] *Cf.* Taylor, *op. cit.,* p. 51.

into nothing but itself, that existed, in a word, in, of, by, and for itself alone. Or, to put it in terms of the actual and the potential, he must discover something that contained and realized within itself everything necessary to its existence and its fulfilment, and that therefore could be described as pure Actuality without taint of Potentiality.

Looking about him in a strictly scientific spirit for such a form of being, he found in his astronomy very nearly what he needed. The heaven of fixed stars was imperishable and unchangeable, and was freed from all potentiality save the inoffensive possibility of "whence" and "whether" actualized by its uniform motion. Its exalted substance outranked so much of animate Nature, even, as was endowed with only vegetative or sensitive soul; and, had it not been for man, it would have been the nearest approach to, and the clearest intimation of the nature of an unmoved mover that the universe afforded. In man, however, Aristotle found traces of exactly what he wanted. Human thoughts were not modifications of the body as our sensations were. They were not associated with special bodily conditions, and they were independent of the existence of any particular organ. They could not occur, to be sure, unless the body were there, but their attachment to it had been whittled down to the vanishing point, and their actual natures were not physical qualities, such as perception actualizes, but immaterial and unchangeable Forms. Moreover, in moments of intuition, our thinking seemed to reduce even its awareness of the body, of sensation and imagery, and of emotion to the vanishing point. It kicked them from under, as it were, and "levitated" without any appreciable support from below, floating of itself, or at least merely suspended from the truth which it contemplated and with which for the instant it was one. Such moments, too, were moments of absolute rest from which even the possibility of mental "whence and whither" had disappeared. When the intellect was thus poised for an instant, it was at a dead centre, so far as any external power was concerned. But it was also at the centre of its own most intense and perfect life. It asked for nothing more and could become nothing more than the truth that arrested it,

held it motionless, gave it existence, and made it what it was.

Another step and an entity that could function as an unmoved mover was at last in Aristotle's grasp. Only imagine the almost severed connection of the intellect and the body wholly broken, make eternal its fleeting instant of intuition and achievement of Form, and confine that Form to its own essence alone, and the goal was reached. Aristotle had now a form of being, the example of whose perfect actuality was sufficient to set every degree of potentiality in the universe going, from the operations of the human mind and the stately "whence and whither" of the outer heaven to the crude capacities of prime matter. Such a being was a combination of metaphysical catalyzer and magnet. Its mere presence set up a commotion in which it took no part and by which it was unaffected, but a commotion, nevertheless, that converged from every side unerringly towards itself. All this was strictly scientific according to Aristotle's lights, as scientific, indeed, as the reasons that lead modern physicists to the construction of electrons or point-events. Indeed, though his theory may stretch the imagination the wrong way, it stretches it no more than do our modern scientific hypotheses to-day. That it led him to a God of sorts, but to a God who at the same time was disqualified from functioning religiously, was neither here nor there. As a scientist he was satisfied, and that was all that counted.

But, unfortunately, he was not wholly satisfied. Two difficulties remained to bother him. In the first place, his hypothesis regarding the nature of motion and the character of the Unmoved Mover, would lead us to expect a much more smoothly running universe than that which we actually find. Where everything is moved by the example of absolute Actuality, we should expect all things to be at least as good as they can be after their kind. It might be no disappointment that in such a system geese were not swans, but they ought at any rate to be good geese.

Such a condition was, to be sure, realized in the universe outwards from the moon. The heavenly spheres ran without stopping on all cylinders, did everything they were capable of

doing, and did it perfectly. But on earth things were quite different. Nothing was perfect after its kind. Everything was an inferior example of its species. Terrestrial affairs jolted and rattled and squeaked like an outworn Ford, in pitiful contrast to the music of the Rolls-Royce spheres. In short, Aristotle had to deal with that air of idiocy, frequently enlivened by moods of criminal insanity, with which any argument for or from design invests the face of Nature. Here was something for which neither the attraction of the Unmoved Mover nor even the mechanical motion imparted by the outer heavens could account. How, then, was it to be explained?

Aristotle was not at a loss for an answer. As we intimated in discussing his biology,[28] he found in the character of Potentiality as such the root of all that we consider evil and imperfect in Nature. Shortcomings of this sort sprang from the possibility of doing the other thing, or of doing nothing at all, that the definition of potentiality as opposed to actuality implied.[29] The possible negative alternative acted as both a brake and a deflector upon every terrestrial process, and retarded and deformed it in ways that frequently rendered life inconvenient, painful, and even dangerous for the very beings whom the system was supposedly aiming to produce and support.

This element of seeming antagonism, or at the best, of indifference to purpose displays itself in two ways. On the one hand the direct accomplishment of both the conscious desires of man and the unconscious designs of Nature meets with obstacles inherent in the structure of the world, which, although particular causes and reasons for their existence can be found, seem to interfere seriously with the general aims of the natural process. Neither we nor Nature can do just what we want, or do it in the quickest or the best way. In such cases we speak of the limitation of purpose by "blind" and harsh *necessity*.[30]

On the other hand the carrying out of design is frequently

[28] *Cf. supra,* pp. 98–99.

[29] *Phys.,* I, 9, 192*b*, 15. *Met.,* IX, 9, 1051*a*, 7 ff. *Cf.* Zeller, *op. cit.,* I, pp. 367 ff.; Ross, *op. cit.,* p. 186 note.

[30] *Cf.* Zeller, *op. cit.,* I, pp. 379 ff.

tripped up by the occurrence of *chance* or unpredictable events. Many such events, to be sure, are due to the collision and interlocking of separate causal processes, any one of which taken by itself is calculable. Thus, if a man goes for an afternoon's sail in Phaleron Bay and is carried off to the neighboring island of Aegina by pirates, or is wrecked there by a storm, he is then in Aegina by chance. For, although all the factors concerned may have perfectly good explanations, and be predictable in themselves, their coincidence and his resultant misfortune are to all intents and purposes unpredictable.[31] When design is flouted in this way, we have cases of coincidence or luck.

But in addition to chance of this sort, Aristotle seems to believe in a metaphysical factor of absolute chance or spontaneity, by which events and things are generated without cause or purpose and wholly unpredictably. Such occurrences are the reverse of necessary and are completely contingent, but they may interfere with the aims of Nature as seriously as do the limitations of necessity.[32] The existence of this element of contingency in Nature Aristotle also tried to attribute, perhaps not altogether successfully,[33] to Potentiality and Matter.[34]

The moral dualism involved in such an explanation of evil and imperfection cannot be avoided. But in justice to Aristotle we must say that it has been reduced to a minimum in his system. In Potentiality and Matter, as he tried to conceive them, there is no positive or active resistance to purpose. There is no principle of evil in the universe, no malevolence, no such thing, for example, as the evil world-soul towards which Plato at one time seems to have been drifting in the *Laws*, and no such thing, even, as an intractable matter in the sense of something *essentially* opposed and recalcitrant to the taking on of Form. Potentiality is responsive to good influences, and the only influence in the universe is for the good. It means well, for all intention is motivated by the Prime Mover. It is

31 *Met.*, V, 30, 1025*a*, 25 ff.
32 *Cf.* Zeller, *op. cit.*, I, pp. 362 ff.; Ross, *op. cit.*, pp. 80 ff., 164, 188.
33 *Cf.* Ross, *op. cit.*, p. 77.
34 *Cf.* Zeller, *op. cit., loc. cit.*

never actively disobedient to the heavenly vision. It does its best to act in accordance with it. Its only inclination is to perfect itself. But it is weak and fluid. It has no chin or backbone. And this purely negative element of negation, or rather of the possibility of negation, makes it a dead weight in the scheme of things, and malforms and vitiates to some extent every particular thing it does.[35]

But Aristotle had yet another correctional problem on his hands. The behavior of the heavenly bodies also gave him some anxiety, and accounting for that was quite a different matter. That things went wrong on earth might be explained by the inability of the Potential ever to do the right thing to such a pitch of perfection that the possibility of not doing it was wholly excluded. But the stuff of which the heavenly bodies were composed was actually free from this debilitating possibility. It could not be other than it was. It could only be elsewhere. Such potentiality as it possessed was not, then, of a sort to act as a brake or a deflector. If anything, it only made the world spin at top speed from "whence" to "whither" at a rate, and with the perfect, spherical motion, calculated to keep it in constant touch with the Unmoved Mover. In this respect no fault could be found with any of the spheres. Their circular movement was the closest possible approach that physical Nature could make to the absolute rest of the First Cause.

A sphere, however, can be revolved in all sorts of directions, all of which are equally consistent with perfection of movement and with complete responsiveness to the attraction of an unmoved source of motion. Still, if all celestial motion were inspired by a single cause, we should naturally suppose that it would be uniform throughout. As a matter of mechanics, the revolution of the outer heaven could impart only its own direction to the inner spheres. And theologically speaking, we should expect love of the same mover, other things being equal, to revolve all the spheres in the same direction. As a matter of fact other things were equal. The inner spheres were identical in form and matter with the heaven of fixed stars. Their only difference was the accident of size. Moreover, they ran without

[35] *Met.*, V, 30, 1025*a*, 25 ff.

friction, without wobbling, without alteration of velocity or direction, just as the outer heaven did. And they were carried in its revolution, and thus seemed to participate in its act of devotion to the origin of its movement.

Nevertheless, we were confronted with the unfortunate and perplexing fact that they interpolated into the general revolution of the whole system particular revolutions of their own at variance both with it and with each other. Each sphere went its own way, and the system as a whole went every which-way. Only on the hypothesis of such contrariness could the observed, untoward movements of the planets and of the sun and the moon be explained. Otherwise, Aristotle's whole astronomical system was bound to come tumbling about his ears. How, then, was this difference of direction in the movements of the several spheres to be explained? As things stood, neither the sphere of the fixed stars nor Matter could account for it. An apparent surd had arisen in Aristotle's calculations.

The problem was perhaps all the more difficult as it seems to have been a child of his later years, born of his dalliance with astronomy at a time when his metaphysics was well grown and fairly set in character. The solution, too, might seem at first glance to involve a difficult and well-nigh impossible rearrangement of his thought. Yet it was obvious, and stared him in the face even more disconcertingly than did the difficulty. Plainly, if celestial movement was inspired through and through by purpose, then the planets and the sun and the moon and the outer heavens were all running at cross-purposes to each other. But if they were running at cross-purposes, they could not be actuated by the same end and be in love with the same beloved. The carriage of the inner spheres in the revolution of the sphere of the fixed stars was purely mechanical and accidental.[36] Their true loves lay in other directions. Only their peculiar individual revolutions were teleological and inspired by a final cause. In that case, each sphere must have its particular cause of motion, or, to put it bluntly, must be running after its own private God. As fifty-six varieties[37] of

[36] *Phys.*, VIII, 6, 250*b*, 28 ff.

[37] Including the movement of the outer heavens.

motion, all equally spherical and perfect, were necessary to explain the celestial mechanism, there must be not one but fifty-six Unmoved Movers.[38]

These results of his interest in astronomy can scarcely have been welcome to Aristotle. It is not likely that he had any particular religious prejudice in favor of monotheism, but so exuberant an outburst of polytheism must have been scientifically embarrassing, at any rate till he had time to collect himself. It was a cardinal point for him, as for all philosophers and scientists, that entities must not be multiplied beyond necessity, and he had, as he thought, reduced this necessity to one principle, or at the most to two if Matter were regarded as positive. Indeed, he had brought with a certain flourish his discussion of the Unmoved Mover to an end by quoting a line from Homer: "The rule of many is not good; one is the ruler." [39] Yet here he was, compelled by inexorable science to submit his universe to many rulers, and forced not beyond, but by, necessity to multiply by fifty-six the one first principle, "on which," he had so sonorously asserted, "depend the heavens and the world of nature."

Moreover, now that astronomy had wished all these Gods upon him, it must have been, as some commentators have pointed out,[40] a question how he was ever to know them apart. The principle of their individuation could not very well be Matter, which accounted for the multiplicity of mundane substances, for an unmoved mover must be pure Actuality and Form, entirely devoid of Matter. But on the other hand how could there be more than *one* case of pure Actuality, since the existence of *many* cases of anything whatsoever was due to the presence of Potentiality.[41]

Apart from this difficulty, however, what was the relation of these new-found Gods to the original Unmoved Mover? Some critics have maintained that Aristotle tried to arrange them in a hierarchy, perhaps according to the position of their

[38] *Met.*, XII, 8, 1073*a*, 33 ff., 1074*a*, 17 ff. *Cf. Phys.*, VIII, 6, 258*b*, 10 ff.
[39] *Met.*, XII, 10, 1076*a*, 5. *Cf. ibid.*, II, 204.
[40] *Cf.* Jaeger, *op. cit.*, pp. 377 ff.
[41] *Cf.* Jaeger, *op. cit., loc. cit.*

spheres, with the mover of the outer heaven at their head.[42] The temptation to do so must have been great, for in this direction lay at first glance the easiest way out of a difficult situation. Furthermore, it was a way suggested to him by the Platonic "lesser gods," the souls of the stars, old friends of his youth, whom he had adopted into his system in the days when he wrote his treatise *On Philosophy*.[43] There they had played parts quite subordinate to the one and only God, little dreaming that they, too, might be some day promoted to leading rôles.[44] They needed, indeed, only to be taken out of their stellar bodies and made both transcendent and independent, to become cases of pure "thinking about thinking," each one of which might inspire its particular sphere with the same love as the original Unmoved Mover inspired in the heaven of fixed stars. Aristotle seems to have effected their transformation and invested them with their new dignity by the time he wrote the eighth chapter of Book XII of the *Metaphysics*. This, incidentally, is perhaps a late meditation inserted by some compiler—with or without a sense of humor—into the midst of an earlier, gravely monotheistic discourse.[45]

But Aristotle can scarcely have failed to see that by promoting these "lesser gods" to leading rôles he had deprived himself of any criterion for arranging them in a hierarchy and for making invidious comparisons between them and the mover of the outer heaven. There was no external ground, unless it were the size of the sphere each one moved. But to estimate the degree of the beloved's charms by the comparative girth of the lover was obviously absurd, and in any case, even the existence of the moved, let alone the measure of its circumference, was irrelevant to the existence and the perfection of the mover. Internally, however, there was as little reason for differentiating the Unmoved Movers in point of dignity. Each one, be it the mover of the fixed stars, or of the sun or the moon, was an equally unmoved mover, and must fulfill to the same degree the specifications of a First Cause of motion. Each was intrinsically as actual, as self-existent, as self-realized, as perfect, and

42 *Cf.* Ross, *op. cit.*, pp. 81, 153.
43 *Cf.* Jaeger, *op. cit.*, p. 372.
44 *Cf.* Jaeger, *op. cit., loc. cit.*
45 *Cf.* Jaeger, *op. cit.*, pp. 368, 383.

as profoundly sunk in "thinking about thinking" as any other. None was afore, none after. There was really no easier way out of it. By every token of astronomy and logic, the glory of the Fifty-Six was co-equal; the majesty co-eternal.

It is simpler, more creditable to Aristotle's intelligence and honesty, and perhaps more in accordance with the facts, to suppose, as other critics have done,[46] that there came a time in the development of his system when he saw that he must leave the question of the Unmoved Mover open. That he hoped to find a single cause for all motion is obvious. That at one period he thought he had done so is no less clear. Later, came the doubts aroused by the results that flowed from his adoption of Eudoxus' astronomy. These doubts, though at first sight they may have disconcerted him, need not have been so very upsetting when he began to reflect upon them. A plurality of Unmoved Movers complicated his system, to be sure, and created difficulties like that of individuation. But it did not threaten his philosophy at any essential point. Motion was explained. That was the all-important thing. He had proved the existence and described the nature of its cause. Whether its cause was single or multiple made no great difference.[47]

He could, then, leave the question undecided without any wrench to his essential convictions. He could, indeed, die happy leaving it unanswered. And this apparently he did. Eudemus, to be sure, affirmed explicity that, in his later years at any rate, Aristotle came to a definite decision that there were as many First Causes of motion as there were spheres.[48] And it has been remarked that the suggestion of the possibility of many Gods, which we find so inappropriately sandwiched into the monotheistic theology of the twelfth book of the *Metaphysics*, may have strayed there from later theological speculations, now lost, in which the polytheistic hypothesis was adopted.[49] But the last extant assertion we have of Aristotle's on the subject is one of doubt tempered, perhaps, by a hope of eventually finding a solution.[50] Since motion is everlasting and

[46] *Cf.* Jaeger, *op. cit.*, pp. 366 ff.
[47] *Cf. Phys.*, VIII, 6, 258*b*, 10 ff.
[48] Jaeger, *op. cit.*, pp. 391–392.
[49] Jaeger, *op. cit.*, pp. 379–380.
[50] *Cf.* Jaeger, *op. cit.*, pp. 383–384.

continuous, there must be, he reasserts, a first, unmoved cause of movement, "whether that cause be one or more than one." [51] This attitude of scientific caution and open-mindedness on his part we may fitly imitate by an unwillingness to rush in where "the master of those who know" feared to tread, and by refusing to hazard any definite reply to the comparatively unimportant question whether Aristotle was a monotheist or a polytheist.

[51] *Phys.*, VIII, 6, 258*b*, 10 ff.

## CHAPTER VIII

## THE ARISTOTELIAN LOGIC

In seeking to determine the nature of the universe and of its Mover, it was inevitable that a man of Aristotle's methodical temperament should be led to reflect also upon the character and discipline of the mental processes by which he arrived at his conclusions. His thoughts were crystallized in language which had a grammar and could only be expressed in nouns, verbs, adjectives, adverbs, prepositions, and other parts of speech, limited in number and definite in character. Furthermore, his argument both with himself and with others had to be carried on along hard and fast lines from which there could be no deviation if his conclusions were to carry weight. Behind these grammatical and forensic necessities there must be an inflexible structure of some sort which thinking was obliged to embody if it was to make sense and to present the truth. It was, then, of the utmost importance to any line of investigation that this structure should be discovered and applied. Aristotle went at the task with the same thoroughness as marked the rest of his labors, and produced a *Logic* that not only is the first systematic work of its kind in European philosophy, but also, after some twenty-four hundred years, still ranks as an all-important contribution to the subject. Indeed, no work of his, unless perhaps it be his *Ethics*, has had so great and so persistent an influence upon later thought.

It was naturally the "parts of speech" employed in philosophizing that were suggested to him most directly by his metaphysical speculations. He found himself talking about "Being," about the One and the Many, about Form and Matter, about the Actual and the Possible, about Movement and Change and their Causes. But terms like these cloaked others more fundamental. "Being" could obviously be used in many

senses. There could be one or many this, that, or the other. Were Form and Matter nouns—that is, things or substances —or were they adjectives or, in other words, attributes of substances? Movement and Change could scarcely be described without reference to time and place, and they also "did" something to something that was "done by." Plainly, then, discussion involving these concepts was carried on in terms of more precise and rigid "parts" of thought. In defining these "parts" Aristotle was much influenced by the exigencies of grammar, although he recognizes only two parts of speech, the noun and the verb, and makes no hard and fast correlation of grammatical distinctions with his "categories," as he calls them.[1] To his mind they are simply the final pigeon-holes in which single words, taken in themselves, and uncombined in the form of propositions, may be docketed.[2]

The number of these categories is given as ten, and in a probably later work as eight. The longer list is as follows: substance, quantity, quality, relation, place, time, position, state, action, and affection. "To sketch my meaning roughly," Aristotle continues, "examples of *substance*,[3] are 'man' or 'horse,' of *quantity*, such terms as 'two cubits long' or 'three cubits long,' of *quality*, such attributes as 'white,' 'grammatical.' 'Double,' 'half,' 'greater' fall under the category of *relation;* 'in the market-place,' 'in the Lyceum,' under that of *place;* 'yesterday,' 'last year,' under that of *time*. 'Lying,' 'sitting' are terms indicating *position;* 'shod,' 'armed,' *state;* 'to lance,' 'to cauterize,' *action;* 'to be lanced,' 'to be cauterized,' *affection*." [4] From the other list,[5] *state* and *position* are omitted, perhaps because he had cause to feel that they were not so irreducible as he had at first supposed.[6]

The most important and indeed the "key" category is *substance*, for obviously unless there were *things*—nouns—a grammar both of language and of thought would not exist. All the other categories presuppose the presence of this *something* if they are to make sense. For without anything to be "long,"

1 *Cf.* Ross, *op. cit.*, p. 22.
2 *Cat.*, 2, 1*a*, 16 ff.
3 The italics are mine.
4 *Cat.*, 4, 1*b*, 25 ff. *Top.;* I, 9, 103*b*, 21–23.
5 *An. Post.*, I, 22, 83*b*, 15 ff.
6 *Cf.* Ross, *op. cit., loc. cit.*

or "white," or "greater," or "here," or "now," or "sitting," or "armed," or "doing," or "being done by," these terms are left hanging.[7] *Substance*, as we have already seen, Aristotle uses in two ways. Its first and wholly accurate meaning is *particular things*. All substance is individual. But, we may remember, the individual as such is not an object of knowledge.[8] We do not know anything about a substance until we can tell *what* it is. To tell what it is is to classify it and give it a family name. To say "Socrates is Socrates" throws no light upon Socrates' nature and leaves me still in the dark. It merely restates the fact that Socrates is there waiting to be investigated. Only when I say "Socrates is a man," do I begin to know him. Hence the narrowest and most confining class, or, as it is technically called, the *infima species* is as near to the individual or true substance as knowledge can get. So far, then, as knowledge is concerned, the *infima species* counts as substance, and Aristotle, recognizing this, confers the title upon it by courtesy.[9] Naturally, it is only with this extension of the term to cover the smallest and closest class in the nest in which every individual is enclosed that logic can be concerned.

Substance, implied as it is in the use of other categories, has certain marks of superiority. Thus, primary substance can never be a predicate, or be *in* a thing in the sense of depending upon that thing for its existence. It is rather the subject to which all predicates are attached and in which they inhere. Then, too, the immediate species and even the wider genera are not predicable in the sense that ordinary qualities are. Each *species* is the set of qualities that is found *only* in a given set of individuals, and that therefore betokens the *kind* of thing these individuals are. Socrates, for example, is not a man in the same sense that he is white or a biped. For his distinctively human quality he shares only with other men, whereas he is a biped in common not only with men but with birds. And, so far as whiteness is concerned, not all men are white and many other things besides men are. The qualities that set apart

[7] *Cf. Cat.*, 5, 2*a*, 29 ff.
[8] *Cf. supra*, pp. 45–46.
[9] *Cf. supra*, pp. 43–44; also *Cat.*, 5, 2*a*, 11 ff., 2*b*, 7 ff., 3*b*, 10 ff.

any one species from all others are known technically as the *differentiae.*

Now the *infima species,* or secondary substance, constitutes, like the individual, a nucleus predicable of no other species. But at the same time it is subject to further description both by predicates that tell us to what other classes the species belongs and by predicates that signify unessential qualities. The qualities that distinguish one lot of species from all other lots form the *genus* within which the species falls. Thus the *infima species* "man" is an animal with five-toed feet. But it is "animal" that gives us the *genus* of the species "man," since it names the form and is defined in terms applicable to all living beings whatsoever possessed of a sensitive as well as a vegetative soul; whereas five-toed is an unessential quality of "man," as it is of Socrates, since not only is it shared in common with other species of animals but, like whiteness in man, it is only found here and there among animals in general.

The *infima species* or secondary substance may be reached by a reverse process of subdivision of the genus. Starting for instance with a genus like "living being" as distinguished from inanimate things, we can differentiate vegetable from animal life, and then distinguish mammals, let us say, from all other sorts of animals, and finally man from every other species of mammals. Each new move in this process of narrowing down will consist in supplementing the distinguishing features of the larger class with those of the smaller, till a Form is found whose instances exhibit among themselves only accidental, unessential variation. The species, in a word, is the genus *plus* the *differentiae,*[10] and the *infima species* is reached when *specific* differences no longer appear within a given group of particulars.

But this rock-bottom, independent, "not in anything else" character is insufficient to mark off *substance* from the other categories. Man is a land-animal and a biped. Indeed, these are features that belong among the wider meshes in the net with which we close in upon his distinctive nature. But they are no more *in* him, in the sense of being unable to exist without him, than is substance.[11] Again the fact that *substance*

[10] *Cf. Met.,* X, 7, 1105, 7*b*, 7.

[11] *Cat.,* 5, 3*a*, 20 ff.

cannot have a contrary or vary in degree is not peculiar to the category, since the same is true of any definite *quantity*. There are, of course, plenty of things that are not Socrates, or not man, or not an animal, but none of these things is the direct *contrary* of the individual, species, or genus, as great is the direct contrary of small, good of evil, bitter of sweet. Nor can Socrates, or man, or animal be *more or less* itself. Each is *precisely* what it is and nothing else. Still, any given quantity, also, such as "two cubits long," has no contrary and admits of no variation.[12]

In spite, however, of its invariable nature and lack of a contrary, substance is able to take on contrary qualities. One and the same man with no variation in his distinctively human character may be now good, now bad, now dark, now light, now hot, now cold. This ability to change and at the same time to retain one's specific character and remain oneself is found in no other category.[13] Though qualities, for instance, admit of difference of degree, the slightest change in the quality as such destroys it and substitutes a new nature in place of the old. White may be more or less white but it cannot turn black without ceasing to be itself, as a man can. Things like "two cubits," or "to-day," or "here," or "double" are in the same box. Try to alter them, and they vanish leaving something else on your hands.

Into Aristotle's discussion of the other categories we need not enter. It is largely devoted to bringing out their differences from substance, or to enumerating the different kinds of qualities, quantities, and relations that can be distinguished.[14] We need only remark in passing that Aristotle thinks that the categories, being unanalyzable, are grasped by the mind with the same immediacy as sights or sounds are perceived by the eye or ear, and that the fact of their presence, like the fact of seeing what we are seeing, or hearing what we hear, is beyond all question or discussion. We do not *judge* that Socrates is a

12 *Cat.*, 5, 3*b*, 24 ff., 6, 5*b*, 11 ff., 6*a*, 19 ff.
13 *Ibid.*, 3*b*, 33–4*a*, 20, 4*b*, 13 ff.
14 *Cat.*, 6–9.

substance, that white is a quality, or that an inch is a quantity. We simply *know* it.[15]

But this direct intuition of categories, like the direct intuition of simple data of sense, is only the beginning of wisdom. We do not think in isolated drops crystallized in different parts of speech. We think in streams in which one category flows into another. We do not chop our words and drop a period after each. We run them together into sentences in which we attribute qualities, quantities, relations, and the like to substances. We make statements of one sort or another. In making these statements we give, of course, a definite content to the categories we employ. We do not say "substance quality" or "substance action quantity," but "Socrates is white," or "Socrates talks a lot." When we link up our mental data or analyze them into their components we pass judgments and enter upon the debatable ground of truth or falsehood. If we judge our mental data to be linked or separated in the way in which their objects are, we have a true judgment, if otherwise, a false one.[16] Or better still and more simply, dropping the mental data as objects of judgment and applying our statements directly to reality, we may say that a proposition is true if it expresses a connection or a separation that is actually there in the outside world; false if it states one that is not there.[17]

The simplest form of proposition or judgment is that involving a noun or a verb and nothing more, like "Socrates exists," or "Socrates talks." Such a proposition looks harmless and innocent enough, but it is loaded with dynamite and ready to explode to all four points of the compass. Our ability to single out one particular object and call it "Socrates" implies that we also recognize other objects as not Socrates, and our naming of "existence" or "talking" involves a similar recognition of non-existence and of not talking. Our original judg-

[15] *Cf. Met.*, IX, 10, 1051*a*, 34 ff.

[16] This is the view expressed in the *De Interpretatione; cf.* Ross, *op. cit.*, pp. 25–26.

[17] *Met.*, IX, 10, 1051*b*, 3 ff.; Ross, *op. cit., loc. cit.*

ment thus hatches out three others, "Socrates does not exist (or talk)," "the things that are not Socrates exist (or talk)," or "do not exist (or do not talk)." [18]

If now we add a third element in the shape of some further qualification, the case becomes doubly complicated. Take, for example, the proposition "Socrates is not tall." Evidently the "not tall" may mean either that Socrates is short, the extreme contrary of tall, or that he merely belongs to a class of objects to which neither of the extremes "tall" or "short" is applicable. This double meaning of "not tall" increases the number of possible combinations from four to eight.[19] Moreover, in such sentences the "is" ceases to denote just the existence of the subject in single blessedness, and becomes a "copula," or kind of marriage certificate, testifying to the union, permanent or temporary, of subject and predicate. This secondary use of "is" Aristotle recognized, but it is a question whether he ever got the two meanings of the verb "to be" completely disentangled.[20]

Simple propositions divide themselves quite patently into two kinds, positive and negative. We are always saying that a thing is, or that it is not, such and such.[21] Less obvious at first glance, but still sufficiently so to raise no difficulties, is the quantitative difference between judgments that are more or less sweeping and universal in their application and those that have to do with a single individual. For instance, if I say "all men are white," I make a statement about all men, or, in other words, a universal one. If I say "some men are white," I make a statement that is neither universal nor particular. If I say "Socrates is white," I pass a particular or singular judgment.[22] As the last kind of judgment is of little use in building up our knowledge, which is concerned with universals, it does not figure in Aristotle's later discussion of the processes of reasoning.[23]

In making affirmative propositions we have to be careful

[18] *De Int.*, 10, 19*b*, 14–19, 20*a*, 3 ff.
[19] *De Int.*, 10, 19*b*, 20 ff.
[20] *Cf.* Ross, *op. cit.*, pp. 27–28; Zeller, *op. cit.*, I, pp. 231–232.
[21] *De Int.*, 5–6, 17*a*, 8 ff.
[22] *De Int.*, 7, 17*a*, 38 ff.
[23] *Cf.* Ross, *op. cit.*, p. 30.

about the "distribution," as it is called, of our predicates. In the statement "man is white," although "man" is used in the sense of "all men," "white" cannot in the same way refer to all white things, for in that case I should have the false proposition "all men are (man is) all white things (the only white thing)."[24] What I really mean is that "all men are *some* white things," or, in other words, that they fall within a class that comprises other objects besides man. In combining negation with quantity we must be even more cautious, for then we have to deal with the ambiguity of the word "not," to which our attention has already been drawn. Thus if we say "men are not large animals," we may mean that they are positively small creatures or that they are merely neither large nor small but middle-sized ones. In the first case the "not" indicates the direct opposite or contrary of large; in the second it means merely the contradictory, or in other words, any degree of size that cannot be defined as big. And when we complicate this with the difference between "all" and "some" we have to walk carefully.[25]

Indeed, the drawing of inferences from a proposition now becomes subject to an intricate set of rules, and requires close watching if we are to avoid erroneous conclusions. In inference "by conversion," as it is called, we must at all costs avoid ambiguity in the use of "all" and "some." For example, I can convert the proposition "men are animals" into "animals are men" if I mean "*some* animals are men," but not if I imply "*all* animals are." To put it technically, in the reversal of subject and predicate involved in conversion I must take care not to "distribute" the predicate over a wider field than it originally occupied. In my original proposition, "men are animals," obviously the class "men" was included within the class "animal." When converting it I must therefore preserve this impression of inclusion and give no ground for believing that the class "men" is as large as, or larger than, the animal group, as I might do if I omitted the "some." Again, the proposition "*some* men are animals" although it assures me that "some animals are men" leaves the questions whether "all men are ani-

[24] *De Int.*, 7, 17*b*, 10 ff. [25] *Ibid.*, 17*b*, 1 ff.

mals" and "all animals are men" unanswered, and forbids me to come to any conclusion on logical grounds. But from the statement "no men are quadrupeds" I can safely infer that "no quadrupeds are men," that "all men are non-quadrupeds," and that "*some* (though not *all*) non-quadrupeds are men," to mention three out of seven possible implications.

We must be even more on the lookout when we try to infer "by opposition" the falsity or doubtfulness of the negative of a given proposition. Thus, starting with the assertion "all men are animals" it is certain that the statements "no men are animals" and "no animals are men" are false, but it may be that the assertion "some animals are not men" is true. If I have merely said, however, "some men are animals," there is no logical reason for denying that "some men are not animals."

But this is not all. To the problems raised by quantity and negation in propositions we must add difficulties that spring from the use of the subjunctive and the imperative as well as the indicative mood. Not all our statements are assertions or denials of fact, like "this is such and such" or "is not such and such." We often say "must" and "may," implying thereby necessity or possibility. And these factors have to be taken into account in figuring out sets of combinations already bewildering enough as they are.[26]

We have, of course, merely been outlining sample moves in a game that Aristotle developed at some length with an embarrassing wealth of rather confusing detail, and that the progress of logic has elaborated and clarified. But they are perhaps sufficient for our purpose, and all the more so since the bulk of our reasoning does not stop short with inferences of this kind. We no more think in isolated phrases than in isolated words. We run our sentences together by the use of expressions like "and so," "therefore," "hence," "it follows that." These expressions free us from the necessity of merely juggling with the subjects and predicates of isolated propositions, and keep adding to our stock in trade. We can go on producing more and more ideas, and can keep them all in the air at the same time, as a juggler brings one ball or plate after another into

[26] *Cf. De Int.*, 7, 17*b*, 1 ff.

play. In this way we build our sentences up into paragraphs, develop new material as we go, and pursue lines or trains of thought.

Moreover, we frequently condense the results of these prolonged conversations with ourselves into single sentences in which the connection between subject and predicate is not immediately obvious. Thus if I say "that is a man," or "that man is tall," it is foolish to ask me why I think so. But if I say "that man is a Greek," I can reasonably be asked how I know it. When I come to explain, it will be found that there lurks in the midst of my statement knowledge that is not explicitly set forth in it. "I know he was born in Athens," I reply, "and all men born in Athens are Greeks." Even this assertion I may have to justify by adding "Athens is in Greece." If these propositions are not forthcoming, my statement, though it may happen to be true, carries no weight of logical conviction.

In sentences of this sort, then, a whole paragraph is concealed. I am inferring my conclusion by using an intermediate class which includes the subject under discussion and is at the same time itself included in the wider group towards which our discussion is expanding. Such inference is a time and labor saving device of the utmost importance. If I know that Socrates was born at Athens, and that Athens is in Greece, I do not have to ask him personally whether it is true that he is a Greek, in order to verify my conclusion. I know that it is so before I even meet him. So, too, if I know that he is a man and that no men are quadrupeds, I am sure that when I do meet him I shall not find him going on all fours. Most of our daily business is conducted in a logical shorthand of this sort, and fairly bristles with ellided propositions which are quietly ignored until we make some statement we are forced to defend. Then we cannot reach for them too quickly, and woe to us if they are not loaded. If we find them, they provide us with a weapon known as the *syllogism.* But if they are not loaded, the syllogism they put into our hands is worse than useless. It proves to be one of those pistols constructed with the muzzle to the rear that we sometimes read of in detective stories, and

it kills not our opponent but ourselves with the speciousness of its argument.

Now we have perhaps already begun to tremble at the additional complexity the combination of these middle terms with "all," and "some," and "not," and "no" introduces into correct thinking. We should have good reason to do so if it were within the scope of our discussion to follow Aristotle's treatment of the syllogism at any length. He was the first really to bring to light the mechanism of thought that it denotes, although Plato's method of logical division in part unearths it. And he was the first to bestow upon it its name. Not unnaturally, then, he may seem a little long-winded and grow a bit tiresome when he talks about it. But here, as in the case of propositions, we shall try to cut him short.

Before entering upon our discussion, however, we shall do well to note one thing. In dealing with the inferences to be drawn from propositions in which no middle term of any importance lurks, we may have come to suspect that their correctness is in part independent of matters of fact. The statement, "the chimaera has three heads" is subject to the same correct and incorrect development by conversion and opposition as the assertion "man has two legs." Aristotle had in part perceived this early in the game and had written a treatise, now incorporated in the *Topics*,[27] in which he showed how all propositions may be developed. As he pondered upon the syllogism, his perception became clearer and more organized, and he laid down certain definite rules of predication that held good, he felt, of all assertions. These rules had to do with the relations of the subject and predicate to each other, irrespective of whether the special content introduced into them for the purposes of argument was actually existent or not. To be sure, argument for the mere sake of argument was not to be encouraged, and little could be gained by making logically correct inferences from statements like "the chimaera has three heads." For it was scarcely probable that propositions of that sort had their counterpart in the objective world. Still, much of our daily thinking and acting was founded upon premises of whose ob-

[27] *Top.*, II–VII, 2.

jective counterpart we could not be sure, or at least had not assured ourselves. These premises, however, asserting as they did things that commended themselves to most men, or to the best and wisest if not to all, might be regarded as probably true. Furthermore, it must be remembered that the principles assumed by the sciences could not themselves be proved, but simply had to be accepted.

Again, these probable propositions are not asserted like bolts from the blue. They are answers to questions that we have put to ourselves or to others. Confronted with the knots of qualities we call things, we are continually asking which qualities seem to indicate what the thing really is, and which are separable from its nature, which inseparable.[28] And we cannot go about the business of life till we have solved, at any rate partially, the problems that the coagulation of sense-data into things forces upon us. Moreover, though Aristotle does not stress this point,[29] it is by asking these questions and answering them that science reaches the principles it assumes. The object of science is to know what things really are, and to attain its object it must be keen to distinguish the essential from the unessential and to codify the different sorts of unessential attributes and relate them correctly to each other and their subject.

Take, for example, an all-important problem of ethics like the question, "what is the good," or "what is right." Now, it may well be that we can never discover what, as a matter of fact, the nature of the good is, or, in other words, construct a really scientific ethics. The tangled jungle of conflicting opinions relative to time, place, and circumstance may prove too thick for us ever to penetrate. Still, since human beings are quick to persecute one another, and even to suppress and mutilate themselves, in the name of some merely temporary and local standard mistaken for absolute, it is of the utmost importance that we should try to get as close to the true character of right and wrong as possible. To do this we must formulate a statement regarding the nature of the good that, though strictly speaking undemonstrable, has the greatest weight of

[28] *Cf. Top.*, I, 4, 101*b*, 23 ff.

[29] *Cf.* Ross, *op. cit.*, pp. 57 ff.

probability behind it. This cleansing of morals from superstition, prejudice, and cruelty, and this redressing of the balance when an ethics lays too much stress upon one virtue or set of virtues to the damage or even the exclusion of others, can only be accomplished by a scrupulous attention to the difference between such things as "essence," "genus," "property," and "accident."

Here, certainly, in the asking of questions and in dealing with the indefinite range of unproved but useful and probable answers to them, the dialectical game can be played with profit. It sharpens our wits, enables us to meet our opponents on their own ground, tightens our grasp of the means for detecting truth and error, and provides us with an instrument for philosophizing about first principles. The general relations of subject and predicate are, then, worthy of study.

Having set forth these considerations in the later portion of the *Topics*,[30] Aristotle proceeds to enunciate his so-called theory of the predicables. Take the propositions "man is rational," "man talks," "man is an animal," "man is hairy." If we reflect a moment, we shall see that these predicates do not all stand in the same relation to the subject. "Rational" tells us what man is and singles him out from every other kind of animal. Examining now the proposition "man is rational" we find that this peculiarity of "rational" is reflected in our ability to reverse predicate and subject without limiting the distribution of the predicate when we do so. We can convert the proposition into "*all* rational animals are men," although we can convert the statement "all men are animals" only into "*some* animals are men."

Or again, take the proposition "man talks." If we convert it we find that here, too, subject and predicate when reversed are co-extensive. Not only does man talk, but the only talking being is man. Nevertheless, "talking" does not define man or set him apart as rationality does. Indeed, were he not rational he could not talk. The ability to talk then is not his *essence*. It is a *property*.

Let us pass now to the other two propositions, "man is an

[30] *Top.*, I, VII, 3–5, VIII.

animal," "man is hairy." In converting the first, as we have just seen, we have to limit, when we make it a subject, a term that was unlimited as a predicate. When we said "man is an animal" we included him among *all* animals. But when we reverse the order we can only say "*some* animals are men." And yet, when we are telling what man is we cannot avoid mentioning the term. When a term enters into the essential description of an object but applies to other species of things as well, we are dealing with a *genus*.

Finally let us look at the assertion "man is hairy." It is governed by the same rule of conversion as "man is an animal," for we can infer from it no more than "*some* hairy things are men," although we have just included men among hairy things in general. But unlike "animal," it does not have to be used in describing what man essentially is. It is an unessential attribute or *accident* of the human species.

This discussion, however, leaves one important point at loose ends. It leaves the various distinctive marks, or *differentiae*, that distinguish the species from the genus lying about beside one another and at the same distance from the object they define. It might seem, indeed, that man could be defined as, let us say, two-footed, animal, viviparous, rational, and mammalian without any respect to the order in which the terms are used, and that our whole logical duty towards him was done by saying that wherever all these characteristics happened to intersect one another, there we found a human being.

But now logic, if it is anything, is tidy and demands order. The species and its distinctive characteristics cannot be left like boxes of different sizes lying about here and there within a roomy packing-case of a *genus* that is loose-fitting enough to contain them all, however they are arranged. On the contrary, if they are to be squeezed into the *genus*, they have first to be put inside one another in a given order that converts them into the nest of boxes with which we are already familiar. The smaller must always be fitted into the next larger, in which, we shall find, it lies so snugly that no space is left between. Only by this rigid process of including one distinctive characteristic within another can man, for example, be neatly and

logically packed into the genus "*animal.*" In terms of the diagrams ordinarily employed by textbooks of logic, we cannot define him merely by intersecting the circles representing the wider general classes to which he belongs. We have to make these circles concentric. To stow "man" away in "animal," we cannot just dump him into "mammal," and "mammal" into "two-footed," and "two-footed" into "viviparous," and "viviparous" into "rational." If we are to come out right, we must first put him into "rational"—which is like putting two envelopes of the same size one within the other, since "man" and "rational animal" are co-extensive. Then we must insert "rational" into "two-footed," which is the next largest class, and then the resultant "rational two-footed" into "mammalian." The next box into which "rational two-footed mammalian" immediately fits will be "viviparous," and this, we may assume for purposes of argument, slides without any intervening space into the genus "animal." The upshot will be that we define man as a "rational two-footed mammalian viviparous animal."[31] No other order of predicates is possible, and we may note, no commas are permissible between our adjectives. Indeed, the introduction of a comma would disrupt our nest of boxes and scatter them in disorder. There is some logic in the rules of punctuation after all.

If we reverse the order of our packing and begin with the largest box first, then the classes to which a thing belongs function as *differentiae.* To be sure, all these classes, however they are arranged, differentiate the object in one measure or another from other things. But they acquire the value of *differentiae* only when they are fitted each within the next larger so as to constrict the subject concentrically little by little and eventually to contain it within a co-extensive class that includes it only, and that it entirely fills. This distinction between the *genus* and the *differentia,* nebulous in the *Topics,* is finely drawn in the *Metaphysics.*[32]

In the *De Sophisticis Elenchis* Aristotle considers the erroneous but plausible types of reasoning that can often be success-

[31] *Cf. An. Post.,* II, 13, 96*b,* 15 ff.
[32] *Met.,* VII, 12 1037*b,* 7 ff., 1038*a,* 25 ff.

fully used with a simple-minded opponent. In the first place, we can use words or construct a sentence ambiguously, or make our hearer punctuate or accent it otherwise than we are doing in our own minds. A second and much more important class of fallacies consists not in the misuse of words but rather in the misdirection of trains of thought. A man, for example, may try to convince me that alcohol is harmful because it is a drug. In that case, unless he is deceived by his own argument, he is relying on the association of harmfulness and habit-form action with drugs in general to make me overlook the fact that some drugs, like caffeine and nicotine, and incidentally alcohol, are harmless and non-habit forming with most people if not abused. In other words he is trying to palm off on me an accidental quality as an essence. Again, if he argues that because too many cocktails are not good for me the cocktail as such is necessarily bad, he is trying to bamboozle me into accepting a special case as a general rule, or in other words, to trap me into becoming an accessory to the fallacy *a dicto secundum quid ad dictum simpliciter* or jumping from a conditional to an unconditional statement. If I decline to be taken in by such argument, he may then perhaps try the *non causa pro causa*, inviting me to behold the economic blessings that flow from the empty bowl, and at the same time adroitly distracting my attention from other possible causes of prosperity and from the prosperity that attends elsewhere upon the moderate use of alcohol. Finally, to finish me off and dry me up completely, he may confront me with an overwhelming mass of plausible but really irrelevant matter, in the hope that I shall be too overawed by its apparent force to see that it is all beside the point and, if it proves anything at all, really proves something quite different from the conclusion he would have me draw from it. If he succeeds in doing this, it is because he has blinded me to the fallacy of *ignoratio elenchi*, or ignorance of sound refutation.

Or, to take another burning question in America, let us suppose that a play or a book, seen or read without objection in many large cities, is forbidden in a provincial town, and that, if protest is made against its suppression, the local censor replies

that its language is too indecent and shocking for him to permit it to appear on the stage or the bookstalls. Plainly, authorities that seek to justify themselves to the public in this way are confident of their ability to commit *petitio principii*, as well as *a dicto secundum*, etc., without being detected. Not only are they trying to make the public believe that something resting merely upon their private opinion really rests upon immutable foundations of universal decency and morality, but they are also assuming the point at issue and begging the question. For, after all, the bone of contention is whether the book or the play is too shocking or the censor too easily shocked. And it is certainly an open question whether that which has been received in many places without objection can be properly called objectionable in itself. The truth may be simply that the person or the group whom it offends are narrow and unintelligent in their views.

These fallacies are still persistent and universal twenty-three hundred years after Aristotle first exposed and codified them. Nor are they confined to any one school of thought. The radical falls into them as readily as the conservative, the liberal as the fundamentalist, and is as glib in their use. The sad thing is, perhaps, not so much that those against whom they are used should be taken in by them so easily, as that those who employ them should so frequently adopt them in all innocence, believing that they are valid forms of reasoning, and should thus fool themselves before fooling others.

Let us turn back now to the syllogism—that form of mental procedure into which all our condensed statements may be expanded, and by means of which we argue from one statement to another. Take the assertion "all Americans are mortal." Obvious as it seems, a moment's reflection must convince us that it has something up its sleeve. For it is not by virtue of being citizens of the United States that all Americans are mortal, but by virtue of a third group of objects, suppressed in the sentence, to which all Americans indubitably belong, and which in its turn as indubitably belongs within the class of mortal things. If we pick the statement to pieces we shall find that this suppressed class is "men" or "human beings," and that our terse assertion

may be resolved into three thoughts "all Americans are human beings," "all human beings are mortal," "therefore all Americans are mortal." The first two statements we are taking for granted. They are *premises.* Both of them, we notice, contain the term "human being," which is squeezed out from the midst of the sentence when our statement is condensed. This elided intermediary link is called the *middle term.* As the predicate "mortal" plainly applies to more, and the subject "Americans" to less, than human beings as a whole, they are known respectively as the *major* and *minor* terms, and the premises in which they appear are called the major and minor *premises.* Given these premises, we rightly draw the *conclusion* "Americans are mortal."

Such is the basic form of the syllogism, known to modern logicians as the "first figure" and considered by Aristotle the logical procedure to which all argument can be reduced.[33] Its secret lies in being sure that all of the minor term is boxed within the middle one, and all of the middle within the major. The middle box is, to be sure, invisible in the final statement of the case, but its hidden presence holds the minor and the major tightly together and prevents the conclusion from being loose.

Unfortunately, however, just as things appear so simple, our old enemies, the implications of "some" and "all" and the negative twists given by "no" and "not" in a proposition, turn up to plague us with no less than sixty-four possible ways of combining these two short premises about Americans and men in syllogistic form. As only eleven of these lead to valid conclusions, we have fifty-three chances of error to avoid. Furthermore, seeing that in any proposition the position of subject and predicate can be reversed without doing violence to the grammar or the sense of the statement, our premises, apart from the complications noted above, will yield four so-called "figures" according as the major and minor terms are used as the subjects or predicates of their respective premises.

With the first figure, in which the middle term is the subject of the major premise, as in the "all men are mortal" part of our syllogism about Americans, we are already familiar. But

[33] *An. Pr.,* I, 4, 25*b,* 32 ff.; *cf.* Ross, *op. cit.,* p. 34.

if we state our premises in the shape "Americans are men," "mortals are men," using the middle term as the predicate of both premises, we have the second figure. Placing the middle term "men" as the subject of both premises, we get the third, and as the predicate of the major and the subject of the minor, the fourth. Obviously the correct use of "some" and "all" and "no" and "not" becomes of vital importance in determining what we can and cannot infer. The upshot of it all is that we have on our hands twenty-four varieties of syllogism that are logically valid, of which five, however, give us only partial or weak conclusions elsewhere demonstrated in their entirety. Our selection of these twenty-four is guided by eight rules governing the correct inference of a conclusion from given premises.

But our troubles are not over. As we saw in discussing propositions, the statements we make are not all in the indicative mode. We modify them with "may" or "must," implying thereby not a simple assertion but the added or diminished weight of necessity or possibility. In the syllogism one premise can obviously be of one sort and the other of another. Here again, rules for the correct inference of the conclusion have to be laid down—a task to which Aristotle applied himself with great diligence and detail.[34]

Although Aristotle unravelled with considerable pains and thoroughness the complexities of the syllogism, he did not sort them out to the extent achieved by later developments in logic. The second and third figures he tried to link up with the first, and to make them dependent upon it for their validity. And the fourth figure he did not recognize as such, though he discussed methods of inference that properly belong to it. Its existence and independence were finally established some four hundred years later by the physician Galen, who followed out suggestions made by Aristotle's successor, Theophrastus. Again, the Aristotelian treatment of the problems raised by the use of "may" and "must" was not wholly satisfactory, and here, too, Theophrastus did much to clear the situation. The hypothetical syllogism was not distinguished and dealt with as such,

[34] *An. Pr.*, I, 8–24.

although Aristotle devoted some space to forms of argument from hypothesis.[35]

Now, so far, we have been inspecting the machinery of argument by *deduction.* We have been examining cases in which we took the truth of certain general propositions for granted, and then *deduced* from them the conclusions that the laws of logic permitted. This, however, is only half of the process of thought, and perhaps the least important half. For the question inevitably arises—what right have we to take general statements for granted? How is it, for example, that we arrive at the truth of such propositions as "all human beings are mortal" or "all Americans are human beings" ? Obviously we must be reasonably sure of such general truths before we can argue with any sense of certainty that all Americans are going to die some day. It is vital, then, for us to understand the machinery by which sound general statements are turned out.

It is plain that the extraction of universal propositions is not a deductive process. On the contrary, we find ourselves moving in exactly the opposite direction. In *deduction* we were arguing from the universal rule to the particular case; here we are somehow building up from the observation of particular cases an acceptable general rule. This reverse move, or perhaps we should say, this move of which deduction is the reverse, is called *induction.*[36] Its novel method, contrary direction, and importance for philosophy and science were not overlooked by Aristotle, and he set himself to exploring its nature and laws with his usual zest. Enthusiastic as he was over his invention, the syllogism, it was only to be expected that he should experiment with it in this new field.[37]

At first sight it looked as if the experiment were successful, and as if a syllogistic structure could be detected in inductive thinking. For, if I were asked on what grounds I argued that "all men are mortal," my mental process would turn out to be somewhat as follows. "Tom, Dick, and Harry," I say to myself, "were all human beings. Tom, Dick, and Harry all died and

[35] *Cf.* Ross, *op. cit.,* pp. 36–37.
[36] *Top.,* I, 12, 105*a,* 10 ff.
[37] *An. Pr.,* II, 23, 68*b,* 15 ff.; *cf.* Ross, *op. cit.,* pp. 38 ff.

proved to be mortal. Therefore all individuals possessed of all the other characteristics of Tom, Dick, and Harry, and classified with them as human beings, possess the characteristic of mortality, too." Here, as in deduction, we have major and minor terms and premises from which a conclusion is drawn. Inductive reasoning, then, seems to be carried on in syllogistic form.

But plainly an element of doubt lurks in a syllogism of this sort. All the cemeteries in the world cannot make it absolutely certain that there may not be hidden in some unexplored African or Amazonian jungle men who do not die. The inference from the particular cases to the universal rule may be a safe bet, but it is not a sure thing. Habitually, moreover, the syllogism is used in situations that involve far greater odds. Thus Aristotle's own example is the inference that all gall-less animals are long-lived from the fact, as he considers it to be, that in such species as he has observed the two characteristics are always found together.[38] A conclusion like this, which is typical of most of our induction, would be a poor insurance risk. The chances of a negative instance occurring and destroying it are too great. Only in cases where the observed instance is clearly typical of the whole, as in mathematics, can our induction be perfect, and can hard and fast conclusions be drawn. For this reason we to-day realize that both science and philosophy are at the bottom speculative, resting as they do upon an insecure foundation laid in the quicksands of an unexplorable space and of a time with an unpredictable future. But it must be remembered that Aristotle believed the number of species and genera to be limited and explorable and their properties to be the same yesterday, to-day, and forever. Therefore inductions like that of longevity from absence of gall might seem to him as perfect as mathematical inferences, and, generally speaking, the inductive structure of philosophy and science might appear in his eyes far more doubt-proof than it does in ours.[39]

Aristotle's superior assurance of the powers of inductive reasoning was reinforced by his psychology. Although, he felt, all knowledge is founded upon sense-perception, a direct

[38] *An. Pr.*, II, 23, 68*b*, 15ff.

[39] *Cf.* Ross, *op. cit.*, pp. 39–40.

intuition of universals, as certain as the intuition of sense-data, is present in it from the start. The fleeting percept lingers in the mind as a memory, and repeated memories give rise to the immediate experience of an individual object. But the perception of a *thing* involves the perception of a universal as well as of an individual element. Each thing is given to sense as some *kind* of thing. Indeed *things* represent the presence of a Form rallying and organizing an otherwise disorderly rout of meaningless sensations. "When one of a number of logically indiscriminable particulars has made a stand, the earliest universal is present in the soul; for though the act of sense-perception is of the particular, its content is universal—is man, for example, not the man Callias."

The ever widening circle of induction is attended constantly by the same intuition. "A fresh stand is made among these rudimentary universals." Just as an individual is some *kind* of individual, so every species is felt to be a species of something. We may indeed be wrong in our attribution, but the fact remains that the species is not apprehended as a species unless it is also apprehended as a species of a wider genus. Mankind is a kind of animal. "The process does not cease until the indivisible concepts, the true universals are established," or in other words, till we have reached the final categories under which we docket the universe.[40] It is clear, then, Aristotle concludes, "that we must get to know the primary premises by induction; for the method by which even sense-perception implants the universal is inductive." [41]

The indivisible concepts in which induction finally comes to rest, or in other words the primary premises of scientific thought and investigation, are not themselves objects of scientific knowledge or capable of demonstration. At first sight this seems paradoxical, but Aristotle's meaning is clear and makes common sense. Knowledge and demonstration consist for him in elucidating the general aspects of a particular case and in finding a Form, or universal law or rule, of which the individual is an instance. We can only investigate and explain the particular by subsuming it under a species, the species by finding

[40] *An. Post.*, II, 19, 99*b*, 32 ff. [41] *Ibid.*, 100*a*, 14 ff.

room for it within a genus. But obviously there is nothing wider, deeper, and more universal than the categories and first principles of science—nothing, that is, under which they can be subsumed and by which they can be "known" and "demonstrated." In them the process of inductive knowledge comes to a full stop; from them the process of deductive and demonstrative knowledge starts. Our mental attitude towards them is not one of question but of answer, not one of scientific inquiry but of an acceptance founded upon immediate apprehension or *intuition*.[42] Our minds in this final stage are no longer reasoning; they are rather pure reason, one with the ultimate constitution of the universe.[43]

This, after all, is merely a statement of our own feeling about any truth that we regard as final. We can and do ask the why and the wherefore of any particular fact. Such asking constitutes science, and "knowing," in the scientific sense of explaining, lies in answering the question. But, when we have reached an all-embracing and final explanation which satisfies us completely, we cannot ask for an explanation of that explanation. We may indeed challenge any solution of the problem, be it theistic, materialistic, or what not, on the ground that it does not account for the appearance and behavior of the world. But to complain of a scientist or a philosopher on the score that he does not try to solve his solution indicts the plaintiff even more than it does the defendant. If the theist, for example, asks the materialist where matter comes from, and why it moves, and moves as it does, the materialist can retort by asking the theist where God comes from and why he has the nature he has. And the materialist in that case will have the advantage of not having been so foolish as to raise the question.

In short, as Aristotle saw, no reason can reasonably be demanded for the reason for everything. Knowledge does not involve us in an infinite regress. Nor does the fact that the final explanation cannot be known in the sense of finding a cause or reason for it mean that it is unknowable. For knowledge in the wider sense is not confined to proving; it includes the final and immediate intuition for which no proof can be

[42] *An. Post.*, II, 19, 100*b*, 5 ff. [43] *Cf.* Ross, *op. cit.*, p. 55.

sought.[44] And in the presence of Reality as we finally conceive it, we find ourselves, like Aristotle, not "demonstrating," or "knowing" in the sense of probing and reasoning out our first principles. Our knowledge has passed from groping to grasping, and now consists in simply "intuiting" first principles and accepting them unquestioningly for what they are.

We turn back to the great field of scientific inquiry bounded by the two goal lines of given percepts at one end and of final concepts at the other, beyond which the game of knowledge cannot be extended. Within this field, however, the mind has plenty of room for exercising and exhausting its capacities for knowing and demonstrating. With the series of inductive forward passes and rushes by which the ball is carried from the particular to the universal we are already familiar. But these passes are checked and stabilized at every move by an opposing play of deductive thought, which must succeed in also carrying the ball from the universal to the particular and in tying the score, if the game is to be brought to a successful conclusion. With this return to the material facts from the first principles that are the presuppositions of all science the process of scientific demonstration is bound up.

One characteristic of the process is plain. All our arguing, as we have seen, takes something for granted. For example, a thing like the logical law of excluded middle—that there is no halfway course between being and not being—is simply assumed on the face of it. And it is almost as obvious that our words have a known meaning and, incidentally, that objects to which they can be applied exist. The presence and the definite meaning of a name, however, are not always sufficient guarantee of the existence of things responding to it; witness the mathematical unit, which can be clearly defined but is not easily found in a world where everything is divisible. In such cases we have to assume both "the meaning of the word and the existence of the thing."[45]

Again, the premises upon which scientific demonstration rests must be true. Conclusions in good logical form can be drawn from out and out false assumptions, and much that is useful can

[44] *An. Post.*, I, 3, 72*b*, 5 ff. [45] *Ibid.*, 1, 71*a*, 10 ff.

be deduced from merely probable ones. But so long as we are dealing with the probable and the contingent, we are moving in the sphere not of science but of opinion. We are not firmly grasping the essence of our subject, but are still hesitating between different possible candidates for that essence.[46] And science differs from reasoning in general in that, not only must its conclusions follow logically from the premises, but the objective situation described by the conclusion must also be the necessary *effect* of which the facts embodied in the premises are the actual *causes*. For "we possess scientific knowledge of a thing only when we know its cause." [47]

The premises, then, from which any conclusion is scientifically demonstrated will always be clearer, not to the eye perhaps, but to the mind, than the deductions we draw from them.[48] We perceive, for example, falling bodies long before we know the law of gravitation. And in time to come we may be able to interpret the well known gravitational formula in terms of some at present unknown, wider law covering electro-magnetic phenomena as well. Nevertheless, since the more specific may be deduced from the more general, once the latter is apprehended the more general will come first in the order of demonstration though not in that of discovery.

Needless to say, the first premises or basic truths from which all scientific demonstration starts will be undemonstrable but unescapable concepts and propositions.[49] Any proposition of this sort, be it of universal or of limited application, is, as we say, axiomatic.[50] Each science, however, has a particular stock in trade of hypotheses and definitions which it assumes. Hypotheses assume the existence of the subject under discussion; definitions lay down and assume the nature and meaning both of the subject and of the properties and attributes whose existence or non-existence relative to the subject is under debate. Thus arithmetic defines the unit, whose existence it assumes, as something quantitatively indivisible, and then proceeds to prove whether various arithmetical properties, whose definitions

[46] *Cf. An. Post.*, I, 2, 71*b*, 8 ff., 33, 88*b*, 30 ff.
[47] *Ibid.*, 71*b*, 29 ff.
[48] *Ibid.*, 71*b*, 25 ff.
[49] *Ibid.*
[50] *Ibid.*

are laid down, are or are not true of it. This is done by viewing the unit in the light of the axioms presupposed by arithmetic, and by seeing what attributes these axioms will or will not permit. So too, geometry after defining and assuming the existence of spatial magnitude proceeds to explore its properties in the same way.

Generally speaking, then, we may say that all scientific demonstration consists in revealing the essential properties of a given kind or genus of existent thing by the application of axioms to the subject and the property in question.[51] Take, for example, Aristotle's own astronomical system. The existence of the heavenly bodies and of their highly complicated movements he took for granted. Circular motion he knew the meaning of and could rigidly define. And by applying the axioms of geometry and locomotion to the observed situation he could show how circular movement was one, or perhaps we should say fifty-six, of the essential properties of that situation. Or, let us take as a modern example the attempt to correlate gravitation with electro-magnetic phenomena. Our subject matter, though complex, exists and can be described with mathematical precision. Assuming now the fundamental concepts of relativity as our premises, we proceed to examine in their light the essential attributes of the two fields, hoping to prove thereby that these attributes are really one and the same, and that they can be re-defined in the terms of a new law covering both spheres. Here, again, we have the three Aristotelian "essential elements of demonstration . . . the subject, the attributes, and the basic premises." [52]

Since science is concerned with an object that cannot be other than it is, and since its premises and conclusions alike must therefore be necessary, its statements will always be sweeping in character and "true of every instance of its subject" at all times and places.[53] But they must be also more than this. It is universally true of all men that they walk, but such a truth has scarcely the dignity of a scientific law. Walking is an *accidental* attribute, which man possesses incidentally. Or again,

[51] *An. Post.*, I, 5, 74*a*, 35 ff., 10, 76*b*, 11 ff.
[52] *Ibid.*, 10, 76*b*, 2–22.
[53] *Ibid.*, 4, 73*a*, 21 ff.

supposing that every time I went for a walk I were caught in a thunderstorm, I could not infer that my walking was the cause of the thunder. In spite of the fact that it was my universal experience it would still be a coincidence.[54] To be scientific a statement must confine itself to *essential* attributes; that is, to attributes that either are contained in the formulae defining the nature of the subject or else involve the subject in their own definition. For example, the line cannot be defined without reference to the "point," or without using the terms "curved" and "straight." All these terms are essential attributes. But, whereas the term "point" can be defined without reference to the line, "curved" and "straight" cannot.[55]

Still, it is not enough, even, to define the subject in terms of its genus and differentiating characteristics. To state that man is an animal and that one of his essential and distinctive characteristics is "talking" would be for Aristotle an accurate scientific observation. But it fails to reach the essence of human nature. That essence can be found only by discovering the distinguishing predicate that is "commensurate" with the subject or, in other words, that cannot be omitted from its definition. To say of man, "he is a talking animal," is not sufficient. But if I say of him "he is a rational animal," I have said enough. I do not *need* to recite his other essential attributes. "Rational animal," then, is the essential attribute *commensurate* with human nature, and denotes what man *is*. A logical sign that the essence has been reached is given, as we have already noted, by our ability to convert the proposition defining it without altering the distribution of the terms. "All men are rational animals" means also "*all* rational animals are men." To obtain conclusions of this sort in which the predicate is not only universally true of its subject but "commensurately universal" with it is the ideal of scientific demonstration.[56]

This ideal, however, is not easy to attain. Frequently, in cases where classification is obscure we associate the essence with individual peculiarities, or fail to observe that some common but as yet unformulated point of agreement among species

[54] *An. Post.*, I, 4, 73*b*, 3 ff.
[55] *Ibid.*, *An. Post.*, 73*a*, 34 ff.
[56] *Ibid.*, 73*b*, 25 ff.; *cf.* II, 16, 98*a*, 35 ff.

is really essential in character. Or again, mistaking the part for the whole, we transfer to the whole truths that are really only demonstrable of the part.[57] To guard against error, we must be sure not only that our original premises are basic and definitive propositions, but also that the conclusion is obtained by middle terms inexorably forced upon us by the premises. A conclusion to which we jump, or that we reach by a non-necessary middle term, has no scientific value. For it will carry no knowledge of its causes or of the fact that the conclusion is a *necessary* connection.[58]

Furthermore, we must not try to prove conclusions within the field of one science from premises that properly belong to another. Geometrical truths, for example, cannot be demonstrated on arithmetical grounds. Nor may we wander afield in our middle terms. Each science must be kept strictly within its own sphere from start to finish, except in the case of derivative sciences which look to their parents for their precepts. Thus, although we cannot prove by geometry any non-geometrical characteristic of the line, the laws of optics, which is a subordinate science, rely upon geometry for their demonstration. Many errors arise from neglecting these precautions.[59]

But scientific knowledge is capable of still further refinement. Take the simple perceived fact that the planets, unlike the fixed stars, do not twinkle. From this I can demonstrate scientifically either that planets do not twinkle because they are near, or that they are near because they do not twinkle. Both inferences might seem to be on a par scientifically. Still, if we look more carefully, we shall see that the implications of the word "because" are quite different in the two cases. In saying the "planets are near *because* they do not twinkle," we do not mean that the steadiness of their light is the *cause* of their proximity. We mean merely that it is a reason why we think them to be near. We start from an observed fact and arrive at an understanding of it. In saying, however, that "the planets do not twinkle *because* they are near," we are stating why a fact exists as well as why we think it does. The proximity of

[57] *An. Post.*, I, 5, 74*a*, 4 ff.
[58] *Ibid.*, 6, 74*b*, 5 ff.
[59] *Ibid.*, 7, 75*a*, 38 ff.

the planets is the actual *cause* of the untwinkling quality of their light. Here I am beginning with a reason and arguing that, in view of the reason, the observed fact *must* be what it is.

Knowledge of this latter sort, in which the reason for inferring a thing is identical with the cause of a thing's existence, is plainly more complete and scientific than a knowledge grounded upon facts that fail to account for the existence of the truth inferred from them. Indeed, it is the sign of a superior as compared with a subordinate science.[60] Moreover, as the cause from which the effect is deduced approaches more closely to the final reason why things are as they are, science becomes purer and less applied, requires fewer basic assumptions, and acquires exactitude and priority. Thus arithmetic is prior to harmonics, which is an application of arithmetical ratios to empirical data like sounds, and it is also more exact than geometry because it does not have to reckon with the additional spatial factor which geometry has to take into account.[61]

We can now estimate more clearly the interplay of induction and deduction in the game of science. We start up the field, as we have seen, backed by our perceptions. But these in themselves, registering, as they do, only particular data here and now, involve no sense of what is always and everywhere true.[62] Again, repeated or even a single perception may give rise to inductions that may break through the line and, in a single brilliant run, score a touch-down by revealing the "commensurate universal" and the ground of the phenomenon in question.[63] Newton, musing in an orchard one summer day, leaped from the percept of a falling apple to the assumption that a law existed "commensurately universal" with the behavior of all bodies in one another's presence. Still, such induction, however correct and brilliant it may be, is no more than opinion, and the touch-downs it makes cannot count, till they have been validated by a deduction, obedient to the laws of the syllogism and charged with both causal and logical necessity, that *demonstrates* the *necessary* connection of the facts with their assumed cause.

[60] *An. Post.*, I, 13, 78*a*, 22 ff.
[61] *Ibid.*, 27, 87*a*, 33 ff.
[62] *Ibid.*, 31, 87*b*, 28 ff.
[63] *Ibid.*, 88*a*, 2 ff.; 34, 89*b*, 10 ff.

To be clinched, a demonstration of this sort must pass the test imposed upon the basic premises of science. These, we saw, must be "reciprocating" propositions in which subject and predicate are co-extensive and therefore convertible without change of distribution. So, too, to *demonstrate* a necessary connection between cause and effect we must prove not only that the cause must give rise to the effect in question but that no other cause can produce it. Of course, apparently similar conditions in different classes of things may have different causes, but, Aristotle feels, this does not alter the contention that in any particular class a given effect can have but one cause. So long as a plurality of causes exists, we have not sufficiently analyzed our group into its constituent species.[64]

In believing that single and reciprocating causes for all effects were eventually demonstrable, Aristotle showed perhaps the same overconfidence in the power of science as he evinced in his conviction that induction could reach universal truths. Since our telescopes cannot sweep the whole heaven, or our minds the future and the past, even a generalization like the law of gravitation, as we have seen, cannot be regarded with absolute certainty as "what is always and everywhere." So, too, in the realm of cause and effect we can never be completely assured that we have grasped the whole cause and nothing but the cause, or be certain beyond doubt that different causes may not at different times give rise in the same species or individuals to identical effects. In short, here as elsewhere the Aristotelian ideal of science has proved impossible of attainment.

To return now to the process of demonstration as Aristotle conceives it. If we reflect a moment we shall find that we have returned to something very like the theory of "predicables." In showing *why* a thing exists, we start with the biggest box in the nest, and then fit in the next smaller boxes one after another, till finally we have the thing in question neatly enclosed layer by layer in a series of middle terms so tightly and solidly packed that it cannot rattle if we try to shake it. But this, we may remember, is precisely what we do when we seek to define the essential nature of an object. Starting with the genus or

[64] *An. Post.*, II, 16–17, 98*a*, 35 ff.

universal as a sort of outer skin we peel off enclosing *differentiae* one by one, till we finally reach the species at its heart. It looks very much, then, as if definition and demonstration were closely allied.

This Aristotle finds to be the case. Definition and demonstration are, to be sure, different things. "Definition does not prove that the thing defined exists."[65] Nor can any sort of logical proof account for *what* a thing is.[66] Essences cannot be demonstrated; they can only be described. Moreover, their description entails more than the closing in and narrowing down that demonstration and definition have in common. This method of procedure is, indeed, a useful accessory, but a definition is really established by the reverse process of starting with the species and then discovering the exact sum of the general qualities that exist *together* in it alone.[67] For example, walking on two legs and bringing forth live young and suckling them in infancy are universal characteristics of the rational animal "man." They are also, taken severally, universal characteristics of other species of animals. All chickens walk on two legs, all vipers bring forth their young alive, and all cats and dogs suckle their offspring. But man is the only animal in which these attributes are *combined* and outside of which this special combination of qualities is never found. They enter therefore into his definition. And his complete definition, like that of anything else, will be formulated by finding the precise number of attributes that "are severally of wider extent than the subject but collectively co-extensive with it. For this synthesis must be the substance of the thing."[68]

But, as we saw in discussing the theory of the predicables, these attributes may be arranged in a concentric order of wider and wider inclusiveness. To reach the definition of the genus to which the species belongs, this order must be carefully determined. By comparing different individuals that resemble one another we extract the fundamental characteristics of their

[65] *An. Post.*, II, 7, 92*b*, 19 ff.
[66] *Ibid.*, 3–7, 90*a*, 35 ff.; *cf.* Ross, *op. cit.*, pp. 49 ff.
[67] *Ibid.*, 13, 96*a*, 20 ff.
[68] *Ibid.*, 32 ff.

species, and by again comparing these characteristics with those of other species we discover something common to different sorts of things. This process we may continue, till eventually we reach a set of features shared by all the species in question, or in other words, a single formula applicable to all the individuals under scrutiny, however different their species may be.[69] Every mother's son of a man, beast, bird, insect, and fish may be defined as an animal. Whatever else he may be, he is essentially an animal. Here we have reached the final and the only point of agreement among *all* the members of Nature's "zoo." In short, we have reached a *genus*, and a *summum genus*, the antipodes of an *infima species*, at that.

In working towards the genus we must always be on our guard against being taken in by surface resemblances and common names. For example, an apparently simple quality like pride, turns out on analysis to mean different things in different individuals. Unless some least common denominator for these meanings can be found, no single wider class in which pride belongs can be worked out. The one name will cover loosely a multitude of species, each one of which belongs in a different genus.[70]

So much for definition as a thing apart from demonstration. In spite of its independence, however, it always does involve a knowledge of the cause of the thing defined. The cause will feature among the essential attributes.[71] Suppose, for instance, I try to state *what* an eclipse really is. I may start by giving a snap definition founded upon observation alone, as "privation of the moon's light."[72] Indeed, unless the reason for the thing is so transparent as to be grasped along with its existence, we always start with a nominal but incomplete definition. But I soon find that I cannot define the eclipse satisfactorily without first knowing *why* it occurs. So far as my observation is concerned, it may be due to the moon's rotation or extinction, or to the earth's acting as a screen.[73] To find out which of these is its cause, or, in terms of the syllogism, to

[69] *An. Post.*, II, 13, 97*b*, 7 ff.
[70] *Ibid.*, 97*b*, 11 ff.
[71] *Ibid.*, 3, 90*b*, 33 ff.; 8, 93*a*, 1 ff.
[72] *Ibid.*, 2, 90*a*, 15 ff.
[73] *Ibid.*, 2, 90*a*, 3 ff.

discover the middle term that connects the moon with privation of light, is equivalent to grasping the essential property of lunar eclipses.

Rotation or extinction will not fit the case when more closely examined. Used as intermediate boxes in the nest, they leave vacancies in which they rattle. But from the interposition of the earth between the sun and the moon the phenomenon may be necessarily deduced. Interposition, therefore, proves to be the box that just fits, or, in other words, the middle term that is "commensurately universal" with the occurrence of eclipses. So, at last, in answering the question *why* the phenomenon occurs I have stated *what* it essentially is. A lunar eclipse is "the privation of the moon's light by the interposition of the earth."[74] Were I standing on the moon, however, I should not have had to look for this middle term. The "why" would have been immediately apparent in the "what," since from a lunar point of observation I should have *perceived* the earth standing between myself and the sun and cutting off the sunlight.[75]

Any one of the four causes may serve as the universally commensurate middle term and means of "sizing up" the essential property. The eclipse we defined apparently in terms of "the antecedent that necessitates a consequent," by which Aristotle seems to mean the material cause. But on this point, and in his general logical use of the material cause, his meaning is obscure.[76] The efficient cause would have to be invoked in describing an event like the entry of the Athenians into the Persian War.[77] Nor could the essence of the after-supper stroll or of a house be defined without reference to its purpose or final cause of keeping one fit or sheltering one's worldly goods.[78] Of the use of the formal cause as a middle term for placing things in their proper niches Aristotle gives no instance. Here again, as in the case of the material cause, he is obscure. His view seems to be that the formal cause has always to appear in the

[74] *An. Post.*, II, 2, 90*a*, 15 ff.
[75] *Ibid.*, 2, 90*a*, 24 ff.
[76] *Cf.* Note to *An. Post.*, II, 11, 94*a*, 22 (Oxford trans.); also Ross, *op. cit.*, pp. 51–52.
[77] *Ibid.*, 11, 94*a*, 36 ff.
[78] *Ibid.*, 94*b*, 8 ff.

definition since it states the thing's exact measure and makes it just what it is and nothing else.[79]

Although, then, the essential nature of a thing is not scientifically demonstrated into existence by syllogistic proof, it can only be uncovered and exhibited for the purposes of science by arguing syllogistically from causes to their necessary effects.[80] Needless to say, however, this rule does not apply to the basic assumptions of science, for which no cause can be found or even demanded. In their case, as we have already seen, demonstration plays no part in determining the essence. "Not only *that* they are but *what* they are must be assumed or revealed in some other way." The essence, for example, as well as the existence of the unit is taken for granted by the arithmetician. No cause for the unit's being, or for its being what it is, can be sought outside itself. All our basic premises are "immediates" of this sort whose demonstration is an "indemonstrable positing of essential nature."[81] This "positing," we may remember, is an act of rational intuition justified by the identity of reason with the rational constitution of the universe.[82]

79 *Cf.* Note to *An. Post.*, II, 11, 94*b*, 22. (Oxford trans.)
80 *An. Post.*, II, 8, 93*b*, 15 ff.; 9, 93*b*, 25 ff.
81 *Ibid.*, 9, 93*b*, 21 ff.
82 *Cf. supra*, p. 184.

## CHAPTER IX

## THE ARISTOTELIAN ETHICS

Of all Aristotle's works the *Nicomachean Ethics* has produced the most profound and the most lasting impression upon western thought. Indeed, it has woven itself into the essential texture of European civilization, and its golden thread still runs through our modern thinking, sometimes lost, to be sure, in a tangle of coarser and darker strands, but never broken, and ever re-emerging to gleam again in the pattern of any enlightened and reflective theory and practice of morals. The point of view, however, that it sets forth was spun out of many years of meditation and of a process of change and development, if not of actual reversal, of opinion. It may, then, be interesting to spend a moment in outlining Aristotle's first speculations on the subject and in tracing the growth of his ethical system.

In morals, as in metaphysics, his early period and style are Platonic. Plato, we should remember, had tried in the *Philebus* to establish ethics on a basis of mathematical exactitude and to formulate a moral equation that would express with geometric precision the components and the ratios of the good life.[1] This ideal of an absolute good, definable in rigidly scientific terms, dominates, we may also recollect, the wise advice regarding statecraft given the Prince Themistion by Aristotle in the *Protrepticus*.[2] There, too, moral and political insight is regarded as an exact science, the gift of a wisdom in immediate contact with the eternal and absolute norms of righteousness.[3] Indeed, we are told, the true statesman is distinguished from the politician in that he is a spectator of real existence rather than of the variegated images of the realm of appearance.[4]

1 *Cf.* Jaeger, *op. cit.*, p. 87.
2 *Ibid.*, *op. cit.*, pp. 85 ff.
3 *Ibid.*, pp. 91–92.
4 *Ibid.*, p. 87.

This adherence to an absolute and exactly definable good stands in striking contrast to the doctrine of the *Nicomachean Ethics*. There the distinction between exact and empirical science is again drawn, but now ethics and politics are classified as empirical and practical, not theoretic and absolute.[5] The good they are to study and to formulate is not divinely instituted, but is expressive of the particular nature and needs of the human organism, and is valid for it alone.[6] It is not suspended from on high but supported from below, and in their search for it the statesman and moralist alike are urged to keep their ears to the ground rather than their eyes on the heavens.[7]

So complete a pirouette is startling. But, fortunately, if we accept the *Eudemian Ethics* as a genuine work of Aristotle's, we have a device that, like the slowing up of a moving-picture film, enables us to catch some, at least, of the connecting movements in Aristotle's mind. He no longer whirls from one position to the other without intervening documentation to trace his course; he reverses himself at a rate that can be followed. The *Eudemian Ethics*, however, is still under suspicion, so we must use it with reserve. But even if it was written, not by Aristotle, but by his Rhodian pupil, it sets forth a point of view intermediary between that of the *Protrepticus* and that taken by the *Nicomachean Ethics*, through which Aristotle may reasonably be expected to have passed in his transition from the one to the other. The disciple, we might feel, had merely reverted to a position once held by the master but later outgrown. In any case, the interpolation of the *Eudemian Ethics* at this point gives us a fairly continuous sequence of moral theory from the *Philebus* of Plato to the *Nicomachean Ethics*.[8] Let us then briefly consider it in this connection and light.

In the interval between the *Protrepticus* and the *Eudemian Ethics* Aristotle had definitely abandoned the Platonic Ideas, and along with them the view that ethics is fundamentally an

[5] *Eth. Nic.*, I, 7, 1098*a*, 26 ff.
[6] *Ibid.*, I, 6, 1096*b*, 26 ff.
[7] *Ibid.*, X, 9, 1180*b*, 29 ff.; *cf.* Jaeger, *op. cit.*, pp. 87–88.
[8] Jaeger, *op. cit.*, p. 278.

intuition by the soul of a transcendent, metaphysically existent Good.[9] The nature of the good is now to be inferred, "using perceived facts as evidence and illustration," rather than argued *a priori* on philosophic principles. Indeed, he tells us, although the philosophic method has still its uses and is not to be disdained, it must be employed with great caution, since it is only too likely to find reasons for things that are really foreign to the subject, and hence is apt to lead scientific investigation astray.[10] At the same time, critics find that the break with the "philosophic method" is not so sharp as it is in the *Nicomachean Ethics*. The notion may have disappeared that the moral law is laid up in heaven, where it is accessible to a wisdom or "pure reason" exercised independently of practical experience. But the spirit of the *Protrepticus* still lingers in a feeling that, even so, "pure reason" still plays an important part in solving moral and political problems.[11] The Platonic faculty of "wisdom," we are told, deprived of its original object of contemplation, the Idea of the Good, turns in the *Eudemian Ethics* to the vision of God. And the life lived by God still determines *a priori* the best life for man and sets the standard for practical morals. The moral life is essentially a pious and religious life, a service and an imitation of God. The measure of rightness in an act is the degree to which it breaks with the world of sense and with all that is all too human in us, and the extent to which it raises us to the divine.[12]

By the time, however, that the *Nicomachean Ethics* was written, God, it is said, had disappeared almost as completely as the Idea of the Good from Aristotle's moral theory. The divine life was, to be sure, still the best life for man.[13] But God was now the God of the *Metaphysics*. He had lost ethical importance and was primarily a scientific hypothesis. He had ceased to be a philanthropist and had become merely the First Cause of motion. His life was that of a reason without outside

[9] *Eth. Eud.*, I, 8.
[10] *Ibid.*, 6.
[11] Jaeger, *op. cit.*, pp. 243–244.
[12] Jaeger, *op. cit.*, pp. 249 ff.; *cf.* Ross, *op. cit.*, p. 234; also *Eth. Eud.*, VII, 14, 1248*a*, 29 ff., 1249*b*, 20 ff.
[13] *Eth. Nic.*, X, 7, 1177*a*, 11 ff.; also 1177*b*, 25 ff.

contacts or interests, absorbed wholly in contemplation, and in the contemplation of itself alone. If, then, this was the best life for man, obviously such a life fell almost altogether outside the sphere of ethical theory and practice. The divine within us expressed itself primarily not in moral but in intellectual activity, and was, indeed, most completely revealed in human form in the impartial and unprejudiced attitude of the pure scientist whose concern is not with good and evil but with truth.[14]

In these circumstances ethics could deal only with the distinctively human, not the divine part of our nature. Its proper study was not God but man. Its business was to deal with the activities "that befit our human estate."[15] The ideal of happiness with which it was chiefly concerned was not the blessedness that accompanies the exercise of the intellect in and for itself, but the well-being that arises from the balanced and harmonious realization of the entire complex structure of human nature as such. And the Platonic "wisdom" of the *Philebus*, which in the *Protrepticus* and the *Eudemian Ethics* had still figured as a vision of God and of the supernatural sanctions for human good behavior, now became, when applied to ethics, a review of the instincts, interests, and capacities of the human animal and a revealer of the purely natural sanctions for a moral order.[16]

Further evidence is brought forward in support of this evolution of Aristotle's moral theory from Platonic beginnings to the scientific naturalism that marks the *Nicomachean Ethics*.[17] But we have noted enough to indicate a possible line of development. Still, we must remember that this line is a matter of conjecture, and that the subject is obscure. One thing only is incontrovertible, and that is the absence of religious and pious overtones from Aristotle's final theory and the strictly scientific temper in which he there approaches his subject.

All our activities, artistic, scientific, practical, and the like, the opening lines of the first book of the *Nicomachean Ethics* point out, aim at some good. This good may be either a state

[14] *Eth. Nic.*, X, 8, 1178*b*, 10 ff.
[15] *Ibid.*, 1178*a*, 8 ff.
[16] *Cf.* Jaeger, *op. cit.*, pp. 249 ff.
[17] *Cf.* Jaeger, *op. cit.*, pp. 254 ff.

of activity or a product of action. And the attainment of certain ends may prove to be at the same time a means towards some further goal. There must then be some final end or good, be it an activity or a product thereof, for the sake of which all other goods are desired, and upon which all our activities converge. A knowledge of this highest good, which is desired for its own sake, and for the sake of which everything else is desired, is of the greatest importance for the ordering of human life. The science that studies this ultimate goal and determines its nature is politics, or as we should say, ethics.[18] Such a science, dealing as it does with a fluctuating and relative subject-matter, cannot do more than "indicate the truth roughly and in outline." It would be as foolish to expect exact and dogmatic statements from it as it would be to accept merely "probable reasoning from a mathematician and to demand from a rhetorician scientific proofs."[19] Incidentally, Aristotle points out, a science of this sort can be profitably developed and understood only by men of mature experience and mind. Even if the shoulders are still young, the head must be old.[20]

Having thus had a dig at Plato and established ethics as a purely empirical and relative science, Aristotle turns to consider the nature of the final good that is desired for the sake of nothing else, and for whose sake everything else is desired. There is no difficulty in naming it. All men are agreed that it is *happiness*.[21] But what constitutes happiness is another matter. Pleasure, riches, honor, virtue, amusement, the Platonic Idea of the Good, to mention only the more possible candidates, press forward for the position.[22] The claims of wealth we may eliminate, at once, for money, even if it be mistakenly loved for its own sake, is not desirable in itself but only for such further happiness as it brings.[23] The Idea of the Good must follow suit, sad as it is for Aristotle to say so. It is open to all the objections urged in the *Metaphysics* against the Platonic Ideas in general. Furthermore, in the field of ethics good cannot be predicated in a single sense of the different

[18] *Eth. Nic.*, I, 1–2.
[19] *Ibid.*, 3, 1094*b*, 11 ff.
[20] *Ibid.*, 3, 1095*a*, 2 ff.
[21] *Ibid.*, 4, 1095*a*, 14 ff.
[22] *Ibid.*, 4, 1095*a*, 20 ff.
[23] *Ibid.*, 5, 1096*a*, 5 ff.

categories, nor, when emptied of its diverse and relative content, is it more than an empty shell. Just straight goodness, divorced from everything else and considered in isolation, is good for nothing.[24] Amusement, too, comes an immediate cropper, for happiness is something that one takes trouble and suffers hardship all one's life to attain, whereas "to exert one's self and work for the sake of amusement seems silly and utterly childish." Amusement is rather a relaxation which we need "because we cannot work continually." But it is the work that makes us happy, and we relax in order to work better rather than work for the sake of relaxation.[25] There remain, then, in the field pleasure, on which the mass of mankind places its bet; honor, or the virtuous and respectable complacency of eminent citizenship, which is backed by "people of superior refinement and active disposition"; and finally a dark horse, which must remain such for the present, known as the contemplative life. But a "moral," respectable existence, however complacent and crowned with honor, now shows signs of being winded and dropping by the wayside, for the living of such a life and the possession of exemplary morals "seem actually compatible with being asleep, or with lifelong inactivity, and further, with the greatest sufferings and misfortunes; but a man who was so living no one would call happy unless he were defending a thesis at all costs."[26] To the more philosophical Cynic doctrine of "morality" for morality's sake, we shall return later.

The claim that pleasure constitutes happiness Aristotle considers later in Books VII and X. But while we are engaged in eliminating old favorites as a preliminary to picking a new winner, we may as well look it over, although in so doing we alter the order of Aristotle's discussion. His investigation is long and detailed and testifies to the strength and importance of the Cyrenaic teaching. With the anti-hedonistic arguments advanced by Plato and Speusippus he is, however, as impatient as he is with Eudoxus' adherence to the Cyrenaic doctrine that

[24] *Eth. Nic.*, I, 6, 1096*b*, 8 ff.

[25] X, 6, 1176*b*, 28 ff.

[26] I, 5, 1095*b*, 22 ff.; 1026*a*, 2; X, 8, 1199*a*, 1 ff.; 13, 1153*b*, 20 ff. The reference is probably to the Cynics. *Cf.* Stewart, *Notes on the Nicomachean Ethics*, I, pp. 66–67.

pleasure is the end towards which all our activities are directed. The extreme position held by the Cynics and Speusippus that no pleasure is a good, and Plato's more moderate contention that most pleasures are not good, and that, even if all were, pleasure as such would still not be *the* good, are, he thinks untenable.

Much of the evidence adduced by Speusippus—that pleasures, in proportion to their pleasurableness, hinder thought; that there is no distinctive art for producing pleasure as there is for producing everything else that is good; and that pleasure is avoided by the temperate and the wise, and only pursued by irrational beings like children and animals—is dismissed by Aristotle as unconvincing and beside the point.[27] Certainly the pleasure we take in thinking does not impede thought,[28] and the fact that the wise man avoids the pleasures children and animals pursue does not mean that he has no pleasures of his own.[29] And what is a *good* chef or perfumer but an artist in producing pleasure?[30] The truth is that the goodness or badness of pleasure is relative to person, time, and circumstance.[31]

So, too, the Platonic exhibit of base and unhealthy pleasures[32] does not incriminate pleasure as a whole. Even thinking may be sometimes injurious to the health, but thinking is not therefore bad in itself.[33] Nor would the fact that some or even most pleasures were base prevent some sort of pleasure from being the highest good.[34] Nay more, very few pleasures really are base or harmful. The great run of physical pleasures, for example, even the most violent ones, are not so unless carried to excess; and so far as "they are harmless, their practice is irreproachable." Only when pleasure is hurtful, or when it breeds an overmastering or painful desire, is it bad. Normally, however, the natural and necessary pleasures of a healthy nature do not lead to excess and do not involve pain.[35] At any rate, it is hard to see how a happy life can avoid being pleasurable, or how a life without pleasure can be re-

[27] VII, 11, 1152*b*, 1–12, 1152*b*, 26.
[28] VII, 12, 1153*a*, 20 ff.
[29] *Ibid.*, 1153*a*, 27 ff.
[30] *Ibid.*, 1153*a*, 24 ff.
[31] *Ibid.*, 1152*b*, 25 ff.; *cf.* 14, 1154*b*, 20 ff.
[32] *Ibid.*, 1152*b*, 20 ff.
[33] *Ibid.*, 1153*a*, 20 ff.
[34] *Ibid.*, 1153*a*, 17.
[35] VII, 14, 1157*a*, 8 ff.

garded as happy. The Cynics,[36] when they maintain that "the man who falls into great misfortunes is still happy, if he is good," are talking nonsense whether they mean to or not.[37]

Nor will the more philosophical argument advanced by Plato and Speusippus hold water—that pleasure cannot be the good because it is not a state of being and an end in which we come to rest, but rather a restless process of becoming that state and attaining an end.[38] In the first place, to say that pleasure is a process has no bearing upon its goodness or badness. Processes are no more bad in themselves than states are good in themselves. The good or evil in them is not intrinsic but is introduced into them by external circumstances, and is dependent upon person, time, and duration. Moreover, the very processes with which pleasure is identified by the anti-hedonists—the processes of removing want or pain—are not really pleasurable. The seeming pleasure that attends them is merely a feeling of increasing relief from the disagreeable, and is incidental to our restoration to a healthy and natural state. But, even then, the state of attained relief is not one of pleasure in itself "naturally, and without qualification." It is merely a state in which we can at last begin to enjoy true, positive pleasure.[39]

The upshot of the matter is that all this talk of "process" and "state" has no bearing upon the question. Pleasure is neither one nor the other. It is an "activity," which must not be confounded with "process." It does not "arise when we are becoming something, but when we are exercising some faculty." Nor does it have any end outside its own enjoyment, except in the case of "persons who are being led to the perfecting of their nature." It consists, not in perceiving the process of removing impediments, but in the unimpeded activity of the natural state—which is an end in itself.[40]

These objections to the Platonic position are in part repeated, and in part expanded, in Book X. That pleasure is better for the addition of wisdom, as Plato maintained, may

[36] *Cf.* Stewart, *op. cit.*, II, p. 150.
[37] VII, 13, 1153*b*, 19 ff.; *cf.* I, 9, 1100*a*, 5 ff.
[38] VII, 12, 1152*b*, 12 ff., 22–24.
[39] *Ibid.*, 1152*b*, 25–1153*a*, 7.
[40] *Ibid.*, 1153*a*, 7 ff.

indeed be an argument against its being *the* good, but not against its being *a* good. Moreover, Eudoxus and the Cyrenaics had Plato hoist with his own petard when they pointed out that anything—even justice or temperance—is better for the addition of pleasure; though in so doing they invited a counter-hoisting, as we shall soon see. Again, on the ground that evil can be opposed both to evil and to a neutral state as well as to good, some people argue that the goodness of pleasure cannot be inferred from the badness of pain. So far as logic is concerned, they say pleasure might just as well be neither good nor bad, or for that matter that it might be another evil. But, whatever the possibilities allowed by logic, experience steps in to prove conclusively that pleasure is neither bad nor indifferent but positively good.[41] Nor, again, does the fact that pleasure is not a quality disbar it from goodness; for virtuous activities and happiness, which are plainly good, are not qualities either. Furthermore, the argument is fallacious that pleasure cannot be a good because it admits of degrees and is therefore indeterminate. The experience of pleasure, to be sure, may be more or less intense, but so may the experience of undoubted goods like justice or temperance. And in the Platonic mixed pleasures, so called because of the admixture of want or pain, the evil might be due, not to variation of the pleasure as such, but to the presence of the adulterant. Nor, for that matter, does the presence of degrees render a thing indeterminate. Health, for example, is a definite proportion or balance, yet it admits of degrees and may be more or less present in different people or in the same person.[42]

Having brought forward these criticisms of the current arguments against hedonism, Aristotle turns to the defense of his somewhat dogmatic and unsupported statement in Book VII that pleasure is not a "process." It is certainly not a movement, he tells us, for motion has velocity, and velocity is not absolute but is relative to a co-ordinate, and this cannot be said of pleasure. To be sure, we may pass quickly or slowly to a condition of pleasure, but when we *are* pleased, we are not quick

[41] X, 3, 1173, 5 ff.

[42] *Ibid.*, 1173*a*, 13 ff.

or slow about it. We are just *pleased.*[43] Moreover, pleasure, unlike motion, is complete at any given moment. It is the nature of motion to have a whence or a whither, to reach out into the future, to be divisible into segments, no one of which displays the nature of the whole, to be incomplete at any one instant, and to complete itself and attain its form only in a period of time. Pleasure has none of these characteristics. It may, indeed, continue, but each instant that we feel it, it is all there in its entirety and is completely and absolutely pleasure.[44]

Pleasure, then, cannot be "process" or "becoming" in the sense of movement. But neither can it be a "process" in the sense of generation, or "coming into being." For what is it that becomes pleasure? And into what is pleasure dissolved when it is destroyed by pain?[45] Moreover, "*coming* into being" is only predicable of things that are built up part by part and are therefore divisible. It is not predicable of indivisible wholes, whose nature is given at one fell swoop. But pleasure is an indivisible whole. Like seeing, it is either there or not there. There are no intermediate steps between its presence and its absence.[46]

Again, it cannot be a physiological process of replenishment and removal of want, such as takes place, for instance, when the body satisfies its hunger. Eating, to be sure, is pleasant, but the act of eating and the pleasure the act gives are two different things, just as an operation, however painful, is not itself pain. Moreover, if pleasure could be reduced to nothing but a physiological process of this sort, then not only should all physical pleasures be of the replenishment type, but all pleasures should be physical. But, how about physical pleasures, like those of smell, and sight, and sound, which do not remove a previously felt want and do not fill an aching void? And how about the pleasures of memory and learning, which are not felt by the body? No, the Platonic objection to pleasure on the ground that it is a "process" is not convincing from whatever angle we approach it.[47]

[43] X, 3, 1173*a*.
[44] X, 1174*a*, 13–1174*b*, 9.
[45] X, 3, 1173*b*, 4 ff.
[46] X, 4, 1174*b*, 9–14.
[47] X, 3, 1173*a*, 29–1173*b*, 19.

Having thus given the devil his due, Aristotle sets to work to exorcise him. The arguments of the Cyrenaics and of Eudoxus that pleasure is *the* good carry as little conviction, he continues, as does the Platonic contention that it is not *a* good. The fact that it is universally sought by all sentient beings and is, indeed, perhaps the only end they all have in common, does not prove the point. Neither does the universal avoidance of pain, its contrary, on the part of all things, nor even the fact that pleasure is sought, not for the sake of anything else but for its own sake alone, and that it enhances the value of everything it touches.[48] The Platonic objections are here straight to the point, and Aristotle reiterates them in spirit and largely in substance.

If the Platonic dismissal, or, at least, derogation of pleasure is rebutted by the hedonistic argument that the wisest and most virtuous life is better for being pleasurable, the hedonistic view, as we have just seen, is no less confuted by the fact that the most pleasurable life is better for being also wise and virtuous. Here honors are at any rate even.[49] Furthermore, the argument that all pleasures, even disgraceful ones, are good because they are pleasurable may be countered on the hedonistic level without any appeal to further standards. It is doubtful if all so-called pleasures are really even pleasurable. Bitter may taste sweet to the sick man, but there is a mawkish, equivocal value to such sweetness. A thing may appear white to a diseased eye that would not do so to a healthy one. Now, are not disgraceful pleasures in the same class? They please the vicious man, to be sure, because of a defect in his constitution, but they are not universally or intrinsically pleasurable. And their pleasantness is of the dubious, invalidish, bitter-sweet quality.[50]

Again, even granting that such pleasures had intrinsic goodness, we might still say that they were not desirable at the price one had to pay for them. Plato had driven this point home by the example of itching and scratching.[51] Aristotle reinforces the contention on a higher level. "Wealth is desirable,

[48] X, 2, 1172*b*, 10 ff.
[49] X, 2, 1172*b*, 9 ff.
[50] X, 3, 1173*b*, 20–25.
[51] *Gorgias*, 481 C ff.

but not as the reward of betrayal." So is health, "but not at the cost of eating anything and everything." [52] How many of us to-day, for example, would take to eating spiders, even if we had irrefutable evidence that such a diet would cure our aches and pains and keep us in the pink of condition? Obviously, then, the pleasurableness of pleasure is not sufficient to constitute its goodness. The source has to be taken into consideration as well. Indeed, it begins to look as if pleasure, taken just as pleasure, were not a single, indivisible genus. We seem rather to be dealing with things different in kind. The pleasurableness of a noble act is not the same quality as the pleasurableness of an ignoble one.[53]

These suspicions are confirmed, if we reverse the argument and approach the matter not so much from the angle of the goodness of pleasure as from the pleasurableness of the good. We instinctively prefer the friends "who consort with us with a view to the good" to the flatterers who do so with a view merely to our pleasure. Indeed, those who have only our pleasure in mind are commonly reproached by us, whereas those who have our good at heart are praised. In other words, the organization of human society and the values connected with it testify to the fact that human happiness lies in more than pleasure.[54]

There are, also, two further considerations that confirm us in holding that pleasure is not *the* good. Plato had intimated that human beings would prefer to remain human beings even though they were sure they could get more pleasure if they were turned into oysters or baboons.[55] Aristotle adds that no human being "would choose to live with the intellect of a child all his life, however much he were to be pleased at the things that children are pleased at." Nor would a man choose "to get enjoyment by doing some most disgraceful deed, though he were never to feel any pain in consequence." [56] In short, we would no more consent to be turned into babies than into baboons merely for the sake of a more pleasurable life, nor would we be willing to

[52] X, 3, 1173*b*, 25 ff.
[53] *Ibid.*, 1173*b*, 28 ff.
[54] *Ibid.*, 1173*b*, 31 ff.
[55] *Cf. Philebus*, 21 A ff.
[56] X, 3, 1173*a*, 1–4.

perform an act we considered inhuman, however pleasurable that act was in itself and however painless its results. We instinctively desire to be human beings, to do nothing contrary to our nature, and to let that nature take its course.

Finally, if there were no such thing as pleasure we should still go on choosing and desiring to be ourselves and to perform the functions with which our nature has endowed us. "There are many things we should be keen about even if they brought no pleasure, e.g., seeing, remembering, knowing, possessing the virtues. If pleasures do necessarily accompany them, that makes no odds; we should choose them even if no pleasure resulted." Hence, pleasure cannot be the motivating spring of our actions and the end at which they aim.[57]

"It seems clear, then," Aristotle concludes, "that neither is pleasure the good nor is all pleasure desirable." The horse backed by Eudoxus and the Cyrenaics has gone as lame as the other entries, wealth, honor, and virtue. Nevertheless, it is not completely crocked. It is equally clear—and here Aristotle seems to be giving the Cynics their quietus and warning the Platonists against too great austerity—that "some pleasures *are* desirable in themselves, differing in kind, or in their sources from the others." [58]

We have now learned what pleasure is not. We have yet to learn what it is, what its relations to happiness as a whole are, and how to distinguish good from bad pleasures. Of its nature we have already been given an inkling. It is not a process or an end, is neither the shooting nor the target. It is, Aristotle has already told us, more in the nature of an activity. But this description is not wholly accurate. Pleasure is rather the completion or crowning of an activity. Take one of the senses for example. It has its proper function and its proper object. And its activity is unimpeded and perfect in proportion as the sense-organ is in a condition to perceive, and the object in one to be perceived, to the best advantage. The clearest vision, we might say, is that of the clearest object by the clearest eye. Now the pleasure connected with seeing is the sign, the awareness, that vision is functioning properly. It is more or less

[57] X, 3, 1174*a*, 4–8. [58] *Ibid.*, 1174*a*, 8–12.

intense according as the eye is in good condition and the object upon which the eye is directed is worthiest of sight, and finest and most beautiful judged by the standards and demands of vision.[59]

What is true of the pleasure attending upon sight is true of the pleasures that accompany all our activities, sensible and intellectual. In every case it is the mark and completion of appropriate functioning; that is, the sign that a healthy subject is concerned with a suitable object. "It arises most of all," we are told, "when both the sense is at its best and is active in reference to an object which corresponds; when object and perceiver are of the best there will always be pleasure, since the requisite agent and patient are both present." So long, then, as both the intelligible or sensible object and the discriminating or contemplative faculty are as they should be, pleasure will be involved in the activity.[60] And since, being only mortal, we tire and our activities flag, our experience of pleasure also varies, and becomes dulled as our interest relaxes.[61]

From the fact, however, that "every activity is completed by the attendant pleasure" we must not infer, paradoxical though this may seem, that without the pleasure the activity is incomplete. After all, as we have just seen, life would go on, and the organism would continue to perform its functions and in doing so to express and fulfill its nature, even if no pleasure resulted. And each of our activities would still be pursued for its own sake and be complete in itself. The presence or absence of pleasure does not affect the clearness of our vision or the fact that the organism naturally desires to see. We should still pursue knowledge just because we are wound up to do so, and our knowledge might be accurate and complete, even if the act of knowing gave no positive enjoyment.[62] An activity, then, is not completed by pleasure in the same sense as it is completed by the fact of its own exercise — a fact that the good condition of the sensible or intellectual faculty and the presence of a suitable object are of themselves sufficient to establish and maintain. The completion that comes from mere exercise is

[59] X, 4, 1174*b*, 15 ff.
[60] *Ibid.*, 1174*b*, 28–31.
[61] *Ibid.*, 1175*a*, 3 ff.
[62] X, 3, 1174*a*, 4 ff.

immanent in the activity, is part of the day's work. The completion that pleasure adds to this completeness is rather a work of supererogation on the part of Nature. Pleasure supervenes on healthy functioning, not as an end deliberately pursued, failure to attain which frustrates the activity, but rather — and here Aristotle suddenly bursts forth with one of his finest and most poetic phrases—"as the bloom of youth does on those in the flower of their age." [63]

Still, in practice, the two sorts of completion are undistinguishable. Nature has made us such that the proper functioning of our organism is suffused with pleasure, whatever we may think about it. From living out our lives and busying ourselves with those things we love most, we cannot help deriving enjoyment. In aiming at life, then, and at the life to which we are best adapted, we are also aiming at pleasure, whether we intend to or not. For life and enjoyment of living "seem to be bound up together and not to admit of separation, since without activity pleasure does not arise, and every activity is completed by the attendant pleasure." [64]

We have now a criterion for distinguishing good pleasures from bad ones. Since pleasure is not an activity or faculty in itself, but is rather a property and a completion of other activities, there will obviously be, not one kind of pleasure, but as many different kinds as there are different kinds of activity. Each activity will have its special form of pleasurable completion, suitable to itself alone, by which alone it is intensified. The pleasure that the painter takes in painting cannot crown the interest a mathematician takes in working out a mathematical problem. Only the pleasure proper to mathematical activity can do that. For that matter, the pleasure attendant upon the exercise of one activity will inhibit the exercise of another almost as much as pain will. If we hate to do sums, we avoid them, or at the best it is an effort to do them. But it is an equal effort, even if we like doing them, when some one is playing to us music that we love.[65]

Pleasure, then, having no complexion of its own, and being,

[63] X, 4, 1174*b*, 23 ff.
[64] *Ibid.*, 1175*a*, 10 ff.; *cf.* 5, 1175*b*, 30 ff.
[65] X, 5, 1175*a*, 21–1175*b*, 24.

as it were, a freshness upon whatsoever cheek it lies, will take on the color, fair or dark, of the activity it enhances. Hence its moral value, its goodness or badness, will be determined by the moral character of the activity it accompanies. "The pleasure proper to a worthy activity is good and that proper to an unworthy activity is bad." If the activity is neutral in moral value, the pleasure is likewise morally neutral. Moreover, human activities may be arranged in a scale. Some we call higher, some lower. This is true both of intellectual activity and sensation. Thought, of course, is higher than sensation, but among the senses "sight is superior to touch in purity, and hearing and smell to taste." The pleasures attending and "completing" these activities may be correspondingly graded.[66]

Furthermore, every species of animal has its proper pleasures just as it has its distinctive functions. In the lower animals these are comparatively uniform. But man is so much an individual, and individual men are so different, that it is difficult to find a type of life and to determine a set of activities and pleasures that are good for all alike. Human nature fulfills itself in many ways, and what is one man's meat is another man's poison. Still, in spite of all this variety of self-expression, there is a standard of excellence common to all human beings. This standard is set by the man who, whatever his particular walk in life and his individual interests may be, we call good and happy. What he considers good we believe to be really good. If then, we would know what pleasures are good, we must inquire into the activities of the man we adjudge "perfect and supremely happy." Whether the activity upon which his happiness rests be one or many, "the pleasures that perfect it will be said in the strictest sense to be the pleasures proper to man." Other pleasures "will be so in a secondary and fractional way," as the other merely incidental activities are.[67]

We are now back at precisely the point from which we started and are again confronted with the question, what is happiness? We have learned what it is not, but are not much wiser as to its true nature. We have distinguished between good and bad pleasures as those that accompany good and bad

[66] X, 5, 1175*b*, 24–1176*a*, 3.

[67] *Ibid.*, 1176*a*, 3 ff.

activities respectively. And the implication is that good activities or, to use another familiar phrase, proper functioning, brings happiness, bad activities, or improper functioning, its reverse. But we are still completely in the dark so far as any criterion for distinguishing good activity from bad activity is concerned. How are we to tell the difference between proper and improper functioning? How are we to know when an activity is as it should be? How are we to differentiate between suitable and unsuitable objects? What is the mark of "the perfect and supremely happy" man? In short, by what token are we to know right from wrong?

Let us, then, begin all over again, "return to the good we are seeking, and ask what it can be." Perhaps we need not go so far back, after all, for in the course of discovering what the good is not we have received many positive hints as to its real nature. We have already agreed to call it *happiness*. We know that it is desired for its own sake alone, and that all other things are desirable only in so far as they contribute to it. We know that in itself it is sufficient to make "life desirable and lacking in nothing," and therefore is not one among the many good things life needs but rather the summation of them all. We know that it is that at which all our living aims. It is then "something final and self-sufficient and is the end of action." [68]

But we also know by this time that happiness is not an end external to action. It does not lie in the future, nor does it, when attained, put a stop to the activity seeking it. We are not always *going to be* happy to-morrow or the next day. We may be and *are* happy here and now.[69] Happiness is something immanent in our activities and present in our daily living. However, Aristotle is careful to point out that a certain length of life is necessary to the attainment of the good. Nobody would call one dead in childhood happy, however happy his childhood might have been. For such an one would not have lived long enough to express in his activities the whole of his human nature.[70] "One swallow does not make a summer, nor does one day; and so, too, one day or a short time does not make a man

[68] I, 7, 1097*a*, 15–1097*b*, 21.
[69] I, 10, 1100*a*, 10 ff.
[70] I, 9, 1100*a*, 1 ff.

blessed or happy." [71] Indeed, Aristotle even goes so far as to extend beyond a man's death the completeness of life necessary for happiness, and to ask whether an individual can be called happy who is not honored after he is dead, or whose descendants or friends meet with great misfortunes. The point is discussed in language suggestive, at times, of grief and rejoicing on the part of the dead according as good or evil fortune befalls the living. But in view of Aristotle's express disbelief in personal immortality this can hardly be his meaning.[72] We may gather it more correctly from our own habit of speaking of a dead man as being unhappy in his children or his associates, without thereby implying that in the hereafter he knows of their calamities and is upset by them. In any case, Aristotle's conclusion is that, although what happens to the friends or descendants of the dead man must influence to some extent our judgment of his career, it is negligible so far as our estimate of his essential happiness is concerned.[73] This can scarcely be otherwise, since the fortunes of a family fluctuate so much, and are so various, that the happiness of an ancestor affected by them would be spotty and in a continual see-saw—which would be a very odd state of affairs indeed, as Aristotle remarks,[74] and one, we might add, calculated to make historians and biographers cross-eyed and to keep them in a turmoil of incessant revision of judgment.

But let us leave the dead to bury the dead and return to the living. We have a last preliminary remark to make about the activities that bring happiness. Being human, and coming as he does endowed and stamped with a special kind of organism and with distinctive activities, it will be his particular human make-up that determines the existence and the nature of the life good and happy for man as such. Individual men have, to be sure, their different vocations in which their particular natures find self-expression. And the different parts and organs of any one man have their special functions. But

[71] I, 9, 1098*a*, 18–20.

[72] On this point *cf.* Stewart. *Notes, etc.,* I, p. 142; note to 1100*a*, 19. Burnet, *Ethics of Aristotle,* p. 49 note to same passage.

[73] I, 10, 1100*a*, 17 ff.; *cf.* 11, 1101*a*, 22 ff.

[74] *Ibid.,* 1100*a*, 27 ff.

over and above the functions peculiar to its individual constituents, mankind must also have a distinctive function of its own which is expressive of its essence and sets it apart from all other kinds of being. With the proper exercise of this function human happiness in general will be bound up.[75]

What, then, is this activity? It is not just being alive, neither is it living and also perceiving. For mankind shares its physical activities and pleasures, and those of sensation as well, with the other animals. Man's distinguishing mark is his possession of reason and his capacity for living according to its dictates. Whatever, then, a man's special make-up and bent may be, he will also have, by virtue of being human, the power to organize on rational lines the proclivities with which Nature has endowed him, and to live, be he carpenter, or sculptor, or tanner, in a reasonable manner. And he will be adjudged good, in proportion as his behavior implies the presence and the guidance of a rational principle. In short, "human good turns out to be activity of the soul in accordance with virtue, and if there be more than one virtue, in accordance with the best and most complete," expressed, we must repeat once more, "in a complete life."[76] Such activity, Aristotle reiterates, perhaps with the Cynic doctrine of virtue for virtue's sake still in mind, will necessarily involve pleasure, not indeed "as a sort of adventitious charm" external to itself, but as a part of itself inseparable from its preoccupation with noble things.[77] Furthermore, — and here, too, Aristotle seems to be thinking of the Cynics — not only is it impossible, as we have already seen, for a man, however "moral" he may be, to attain the good and be truly happy in the midst of great misfortunes, but a modicum of positive external goods such as friends, money, children, good birth, and good looks, is also necessary if human activity is to be carried on in the greatest accordance with virtue. "For," as he remarks, doubtless with Antisthenes' scorn of the amenities of life in mind, "it is impossible, or not easy to do noble acts without proper equipment."[78]

Still, although happiness may be crushed and maimed by mis-

[75] I, 7, 1097*b*, 21 ff.
[76] *Ibid.*, 1097*b*, 21–1098*a*, 19; 9, 1100*a*, 4 ff.
[77] I, 8, 1099*a*, 7 ff.
[78] *Ibid.*, 1099*a*, 31 ff.

fortunes, it may, even so, defy them and rise in part triumphant over them. The major part of its foundation lies in activities that are comparatively immune to the blows of fortune, and it may be partially attained even in circumstances that "both bring pain with them and hinder many activities. . . . For nobility shines through when a man bears with resignation many great misfortunes," provided only his resignation be attained not through cultivating "insensibility to pain," as the Cynics taught, "but through nobility and greatness of soul." [79] Moreover, a man whose activities are in accordance with virtue can never be called wholly unhappy, whatever his circumstances may be, "for he will never do the acts that are hateful and mean." Indeed, he can never become truly miserable, even "if he meet with misfortunes like those of Priam," though, on the other hand, under such conditions he can never reach true "blessedness." [80] Happiness is not wholly or essentially dependent on chance. Nor is it a heaven-sent gift, divine though it may seem. Its foundations lie deep in the capacities of human nature, and "all who are not maimed as regards their potentiality for virtue may win it by a certain kind of study and care." [81]

When all is said and done, however, we cannot omit all reference to good fortune and material prosperity from our definition of the good. We must, then, expand it slightly, and now say that "he is happy who is active in accordance with complete virtue and is sufficiently equipped with external goods, not for some chance period but throughout a complete life." [82] But we are still far from knowing what happiness really is. For the word "virtue" has kept cropping out again and again in the course of our discussion, and evidently dominates the situation. And yet we have, so far, no inkling as to what constitutes virtue. But until we know its nature how can we tell whether an activity is in accordance with it? Or again, it is all very well to talk glibly of our activities' being governed by reason; but how are we to know those that are from those that are not? What is the mark of rational behavior as dis-

[79] I, 10, 1100*a*, 30–1100*b*, 33.
[80] *Ibid.*, 1100*b*, 33–1001*a*, 8.
[81] I, 9, 1099*b*, 9–31.
[82] I, 10, 1101*a*, 14–16.

tinguished from irrational? Evidently we have still a long row to hoe.

We may set to work with the remark that Aristotle does not mean by "virtue" at all what we mean by it. For us the word has almost lost its association with any excellence save "moral" excellence. We should not think of saying that the man who played the flute well played it "virtuously," or that a good digestion was the mark of a "virtuous" stomach. But this is precisely what Aristotle and the Greeks would say. For them "virtue" meant excellence of any sort, and could be predicated just as properly of digesting or seeing or carpentering or playing the flute as of our so-called "moral" behavior. Indeed, Aristotle narrows down the scope of our search by expressly reminding us that the virtue we must study is the virtue of human beings, not of other things, and that among human beings we are concerned with the virtues not of the body but of the soul.[83] For the virtues of "vegetative" functions like nutrition or reproduction are "common to all species and not specifically human," and have no share in distinctively human excellence.[84] So, too, he probably would have added, the virtues of the senses and of the other activities of the sensitive soul fall outside our province. The excellence of all these functions contributes, to be sure, to human excellence in general. No man is a completely virtuous and happy human being who has bad eyesight or a defective digestion. Still, his essential excellence is displayed in connection with the activities of the rational part of his soul, both as their excellence in and for themselves brings him philosophy and understanding and practical wisdom, and as their guidance of his complex nature and life causes his behavior to be "liberal" or "temperate" or "just," and bestows upon him what we call "moral character." It is the virtues of these activities, both when at work and at play —of the intellectual and moral virtues, as Aristotle calls them, and more especially of the latter—that are the proper subject-matter of ethics.[85]

The intellectual virtues can be acquired by teaching, but

[83] I, 13, 1102*a*, 14–18.
[84] *Ibid.*, 1102*b*, 2 ff.
[85] *Ibid.*, 1102*a*, 5 ff., 1103*a*, 3 ff.

"moral virtue comes about as a result of habit." Particular moral habits and moral character in general are built up, like all habits, by the repetition of moral acts. Morality in its developed form is neither inborn in us, nor is it artificial and contrary to our nature. It is rather the actualization of possibilities latent within us. We cannot begin too early to actualize these potentialities in the right way, or, in other words, to form virtuous habits of action and develop a virtuous character.[86]

Conversely, as a virtuous habit is built up and a good character becomes fixed, particular virtuous acts become less labored and more spontaneous. Indeed, to be really virtuous they must not be performed by chance or in a perfunctory manner. Just as happening to speak grammatically or accepting the suggestions of one's teacher does not make one grammatical, so, unless one acts from knowledge and from choice, with a recognition of the value of moral behavior and in accordance with a settled disposition to act virtuously, one is not as yet actually virtuous but is in the process of becoming so.[87] To developing a virtuous habit of mind, from which good acts will proceed naturally and spontaneously, every wise legislator bends his efforts, and the constitution he devises is adjudged good or bad according to the fixed moral temper it produces in the citizens subjected to its provisions.[88]

But we are still beating about the bush. The question is, how are we to know the virtuous from the vicious act? What is to be our criterion for distinguishing the moral habit and character? The answer seems still as far away as ever. And yet it is very simple, in its broad outlines, at least. To discover it, we have only to drop for the moment "virtue" in its narrow, "moralistic" use, and reflect upon what we mean by the virtue or excellence of any activity whatsoever. We shall, however, most easily ascertain when an activity is at its best if we first note the conditions that tend to destroy it.

Those conditions are of two sorts, and stand in violent opposition to each other. If we take more or less than a certain amount of exercise, or eat and drink more or less than a certain

[86] II, 1, 1103*a*, 14*b*, 25.
[87] II, 4, 1105*a*, 17*b*, 18.
[88] II, 1, 1103*b*, 3–7.

amount, our health is injured; whereas a medium quantity is good for us and keeps us well. More than this mean proportion is *too* much, less than it is *too* little. We find, then, the excellence or "virtue" of exercise or of eating by striking a mean between the extremes of excess and defect. The moral virtues are no exception to this rule. They, too, will consist in steering a middle course so far as our moral activities are concerned, and they will be attained by applying to the whole of our life the old Greek adage of "nothing too much" or, we might add, too little. Here we have at last the famous Aristotelian doctrine of virtue as the "happy" or "golden" mean. It should be noted, however, that the doctrine was by no means original with Aristotle. It merely formulated philosophically the supreme moral value the Greeks in general assigned to moderation or temperance, and it had already been expressed by the poets Theognis [89] and Pindar [90] in the famous phrase "nothing in excess." Moreover, the Aristotelean formulation simply carried on the Pythagorean doctrine of Limit, and it had, for that matter, been stated and applied politically by Plato in the *Statesman*.[91]

In the case of an animal like man, which exhibits an enormous amount of individual differences and of divergencies from type, no hard and fast rule of moderation can be laid down so far as any of his activities are concerned. There is no mathematical formula for the mean, such as Plato had demanded in the *Philebus* for his "symmetry" and "harmony." If, for example, two pounds of food are too little for an athlete and ten too much, the trainer does not prescribe the arithmetical mean of six pounds. He studies first the nature of the person with whom he is dealing, and then prescribes what is neither too much nor too little *for him*. And generally speaking, that which proves to be the golden mean in any of the functions of one individual may be an excessive or defective degree of the same function in another person. Each case has to be decided on its own merits.[92]

These individual differences display themselves also in the sphere of moral activity. For example, spending that is liberal

89 *l.* 335.
90 Fr. 235.
91 284 A–B. *Cf.* Barker, *op. cit.*, pp. 280–281.
92 II, 6, 1106*a*, 24–*b*7.

and virtuous in one man may be stingy in another and prodigal in a third. It all depends upon the circumstances. But in every case the virtue of the act will lie in its being the happy mean between overdoing and underdoing, *relative to the person in question.* The same is true of the passions, such as fear, confidence, anger, pity, etc., aroused in us by our give and take with the world. Here, too, the right amount to feel is not too much or too little, but enough. And "enough," as in the case of our acts, is a relative term. The passions and emotions of the virtuous man will be aroused "at the right times, with reference to the right objects, towards the right people, with the right motive and in the right way."[93]

A further complication is introduced into the discovery of the mean by the fact that pleasure and pain are so closely bound up with all our acts and emotions. What we like we tend to do to excess; what we dislike we tend to scant. Thus the true mean is often displaced by an apparent one. Against the false perspective imparted by pain and pleasure to our judgment of the mean we must be always on our guard.[94] Pleasure and pain should be dismissed entirely from our calculations, as Helen would have been dismissed from Troy had the wise Trojan elders had their way.[95] Or, if that cannot be done, we should at least establish the mean amount of pleasure or of pain we ought to feel in the circumstances and take that only into account in estimating[96] the moral significance of any given situation.

Hitting the golden mean dictated by all these conditions is a difficult feat; no less difficult, indeed, than spotting the centre of a circle. As it takes a mathematician to solve the one problem, so it needs an expert in ethics to solve the other. "It is no easy task to be good." Hence we should not be surprised to learn that goodness, strictly speaking, "is both rare and laudable and noble."[97] The great mass of men only approximate it, and from them we can only demand a "second best" in conduct. But fortunately we can swing a little to one side or

[93] II, 6, 1106*b*, 20 ff.; *cf.* 7, 1108*a*, 30 ff.
[94] II, 9, 1109*b*, 1; *cf.* 3, 1105*a*, 1 ff.
[95] *Ibid.*, 1109*b*, 9 ff.
[96] II, 6, 1106*b*, 18 ff.
[97] II, 9, 1109*a*, 20 ff.

another of the absolute dead centre of virtue without going seriously astray. "The man . . . who deviates little from goodness is not blamed, whether he do so in the direction of the more or the less, but only the man who deviates more widely; for"—and here Aristotle shows himself a man of the world—"*he* does not fail to be noticed." However, the extremes never exactly balance morally, and swinging in one direction is always worse in any given case than swinging in the other. Therefore, to veer towards the less objectionable extreme is the lesser evil and counts as the better "second best." If, then, we cannot hit the point that marks complete virtue, we should at least err on the side of the preferable of the two vices between which virtue lies.[98] If, for example, we cannot be wholly courageous it is better to incline to excess rather than deficiency and be rash rather than cowardly; but, on the contrary, if we cannot be completely temperate it is better to lean towards deficiency rather than excess, and be over frigid in our pleasures rather than self-indulgent.[99]

Although, as we shall soon see, the happy mean can only be determined by the exercise of reason, the extent to which it is possible to depart from the mean without passing beyond the point where the "second best" ends and blameworthy activity begins, is not easily determined by reasoning, "any more than anything else that is perceived by the senses; such things depend on particular facts, and the decision rests with perception." In other words, the exact line at which permissible shades into forbidden deviation is a matter of practical experience, and, we may also say—giving "aesthesis," the Greek word for "perception," the aesthetic connotation it has received in English—of good taste.[100]

The doctrine of virtue as a mean, Aristotle takes care to point out, is quite consistent with the fact that some actions and passions apparently do not admit of degrees but are bad in themselves. We cannot, for example, talk of moderate murder or moderate robbery as a golden mean between too great and too small an exercise of the activity of thieving or killing.

[98] II, 9, 1109*b*, 1 ff.
[99] *Ibid.*, 1109*a*, 1 ff.
[100] *Ibid.*, 1109*b*, 18 ff.

And we cannot strike a happy balance between too much and too little shamelessness or envy or spite. Nor, Aristotle blandly assures us, is adultery any the better for being committed "with the right woman, at the right time, in the right way."[101] These acts and these feelings "are themselves bad, and not the excesses or deficiencies of them," because they are, as they stand, already either defects or excesses. Shamelessness, for example, is too little of a feeling of shame that in moderation is good. Thieving is the expression of too great a degree of desire to acquire property[102]—a desire laudable enough, if not overdone. But any attempt to find a golden mean within these emotions and acts is to ask for a moderate degree of something that is in itself an extreme degree. Obviously "there can be neither a mean of excess or deficiency, nor excess and deficiency of a mean."[103]

Having thus set forth his doctrine that virtue is a moderate amount of the same activity as in excess or defect is vicious, and that vice is too much or too little of the same activity as in moderation is virtuous, Aristotle next proceeds to illustrate and support his view. This he does by running through the list of virtues and vices, sorting out those that seem to go together, and making them up in triads, in each of which a virtue is neatly sandwiched between its attendant vices of excess and defect. Some passages of the second, a great part of the third, and all of the fourth book are devoted to arranging the display. We have not, however, the time to linger at this ethical luncheon-counter, spicy comment though it is upon the moral diet that appealed to the palate of Aristotle's contemporaries and, for that matter, is still full of flavor for the modern world. We can only read the bill of fare, take a nibble at a sandwich or two, and pass on.

Courage, as we have already seen, is the right or mean amount of the same activity as in deficiency constitutes cowardice, and in excess a mad fearlessness or rashness. This triad gives rise to a long discussion of what ought and ought not to be feared, and of the tendency of other qualities like

[101] II, 7, 1107*a*, 8 ff.

[102] *Cf.* Ross, *op. cit.*, p. 196.

[103] II, 6, 1107*a*, 20 ff.

shame, passion, confidence, ignorance, and military knowledge and the habit of military discipline to masquerade as courage, though they lack the nobility of attitude and choice that characterizes genuine bravery. Again, we have also already noted that temperance is the right amount of avoidance of pain and of indulgence in pleasure, and that too little concern with them is the vice of insensibility, too much the vice of self-indulgence.[104] This statement, also, comes in for amplification. The pain factor, we are told, is comparatively unimportant so far as its moral bearings are concerned. And the vice of defect or insensibility is rare. Moreover, many pleasures must be excluded from the sphere in which the contrast between temperance and over-indulgence has an ethical significance. The delights of learning and of talking, even though the talk be trivial, and the aesthetic pleasures that accompany sight and sound and smell and some sorts of touch are also ruled out. Thus we are left with little more than the pleasures of eating and of sex to which the moral distinction between temperance and self-indulgence can apply. But here the rule of the mean holds good. "The things that being pleasant make for health and for good condition" the temperate man "will desire moderately and as he should, and also other pleasant things if they are not hindrances to these ends, or contrary to what is noble, or beyond his means." Nor when these pleasures are absent will he feel more than the amount of pain and craving proper to the circumstances.[105]

The courage and temperance triads are grouped together by Aristotle as having to do particularly with the relations of the vegetative to the rational side of human nature. We pass now to combinations that illustrate higher functions of the soul. The stingy, liberal, prodigal sandwich is the staff and the crust of economic life. The proper making and spending of money is a nice enough problem as it is. And it is further complicated by the tendency of the extremes to cross and become confused in such a way that a man may be both stingy and prodigal at the same time. His attitude towards making money may be that of the miser—to make it at all costs and

[104] II, 7, 1107*b*, 4 ff. [105] III, 10–12, 1117*b*, 22–1119*b*, 18.

from whatever sources—while at the same time he spends it in the most vulgar and extravagant way. The liberal man, however, both takes the right amounts and from the right sources, and "spends the right amounts and on the right objects, alike in small things and great, and that with pleasure." [106]

The virtue of magnificence links economics with aesthetics. To display it one must not only have money but taste. One must spend in the manner not only of the liberal man but of the artist as well, for only the man who combines aesthetic sensitiveness with the possession of money can "spend large sums tastefully." Excess of magnificence is the vice of showy expenditure in the wrong circumstances and the wrong manner, or, in other words, vulgar "splurging" and ostentation. On the other hand, not to live on the scale and with all the beauty and refinement of surroundings that one's means permit is a sign of the vice of niggardliness. The niggardly man will always be hesitating and considering "how he may spend least" and thinking "he is doing everything on a bigger scale than he ought," and "after spending the greatest sums will spoil the beauty of the result for a trifle." [107]

Somewhat akin to the magnificence triad is that of pride or greatness of soul. This has to do, not with the fitness of man's surroundings and scale of living, but rather with the propriety of his social relations to his neighbors. The proud man is self-respecting, estimates his worth at its true value, "claims what is in accordance with his merits," and is touchy regarding his honor. He has a correct realization of the advantages of birth, wealth, and position, but he does not despise the less fortunate, provided they possess goodness and virtue. Indeed, towards those below him he is affable and unassuming, since "a lofty bearing among humble people is as vulgar as a display of strength against the weak." But with his equals he is on his dignity. He never asks for favors for himself but is quick to confer them upon others. He is independent, frank, immune to flattery, and reserved in his expressions of admiration. He is no gossip, speaks ill of nobody, and is unmindful of wrongs done him by others, "for it is not the part of a proud

[106] IV, 1, 1119*b*, 19–1122*a*, 17. [107] IV, 2–1122*a*, 17–1123*a*, 34.

man to have a long memory, especially for wrongs, but rather to overlook them." And he is very careful of his deportment. He never hurries, and he never gets excited in conversation and talks in a shrill voice.

Deficiency of pride and self-respect is the vice of humility and self-depreciation, which stands in the way of a man's realizing his own worth, and of his performing even the noble actions of which he is capable and reaping their proper reward. Excess of pride, on the other hand, is the vice of vanity and vainglory, which leads men to estimate themselves above their true worth. The foolish and ignorant victims of this vice, in order to maintain their fictitious value, are always undertaking more than they can perform, making a great show, and bragging about any good fortune that befalls them as if it were a tribute to their personal merits.

Such are some of the broader lines along which desirable and undesirable moral character is laid out. To our modern way of thinking they do not at first glance seem to touch essential morality very closely, but rather to attribute undue ethical weight to things that are trivialities so far as the grave business of salvation is concerned. We must remember, however, that crime is automatically excluded from Aristotle's discussion because it is an extreme of which no mean amount is possible. And we must also take into account the profound moral importance that beauty, dignity, and refinement of living had for the Greeks. No man, however "worthy" in our sense of the word, would have been called by them truly virtuous whose unpleasantness and vulgarity offended the taste of his fellow-citizens and marred the urbane and harmonious picture afforded by a really civilized community. Moreover, even from the point of view of our rougher ethics, it must be admitted that the qualities Aristotle extols or deplores not only have an immense effect upon the happiness or unhappiness of those in immediate contact with them, but also show whether the winds of a character's moral doctrine are blowing it towards good or evil in general.

The rest of Book IV deals with less important and more confused virtues, such as ambition, good temper, diplomacy,

avoidance of boasting, humor, tact, and the like—in which the relation of mean and extreme is harder to make out. Once he has disposed of these, Aristotle turns to the subject of *justice*, to which he devotes the whole of the fifth book. This partiality to justice is due to the importance the virtue assumed in Greek eyes. As the reader of Plato knows, it had not only the particular meanings that correspond more or less to our modern usage of the term, but it had also for the Hellenic mind much the same general significance as "righteousness" has for us. In this sense, it was no longer one among other virtues, with a special character of its own distinguishing it from courage or temperance, but was rather the component and essence of all moral activities. As a consequence of this double meaning the words "justice" and "injustice" had both come to be ambiguously employed, with a resulting confusion that Aristotle notes and takes upon himself to clear up. With their general significance of "righteousness" and "unrighteousness" he is not concerned. Nor is he particularly interested in the narrow, legalistic sense of obedience or disobedience to law. What he proposes to study is justice in its aspect of *fairness* and in so far as it has to do with the proportioning of wealth and civic honors.[108]

But even so restricted, "justice" has two meanings. It may be distributive or remedial. On the one hand, it may describe the fair distribution of goods among individuals in proportion to their deserts, and, on the other, the redress of all violations of fair treatment of one individual by another, be that violation the breach of a contract voluntarily entered into by both parties, or a wrong of force or fraud suffered involuntarily by one party at another's hands. Distributive differs also from remedial justice in that it apportions in accordance with the general character of the persons concerned, whereas the remedial type takes only the nature of the particular act into account. The office, for example, to which a man should be elected, or the allotment of public lands or possessions he should receive, ought to be proportional to his station in life or to the services he has rendered the community. But in cases where one man has

[108] V, 1, 1129*a*, 1–2, 1130*b*, 29.

wronged another it makes no difference "whether a good man has defrauded a bad man or a bad man a good one, nor whether it is a good or a bad man that has committed adultery; the law looks only to the distinctive character of the injury and treats the parties as equal." This difference between distributive and remedial justice Aristotle tries to express mathematically in terms of geometrical proportion *vs.* arithmetical progression.[109]

Justice, even of these two kinds, does not, however, involve out and out reciprocity as the Pythagoreans thought. It is impossible to reward merit or to repay injustice in kind. Nevertheless, the economic and commercial life of a city—and here Aristotle makes an interesting excursion into economic theory—does rest upon the principle of reciprocity. The moment we have division of labor, we have men of different trades endeavoring to exchange their services or their products on an eye for an eye and a tooth for a tooth basis. Just what shall constitute an eye for an eye is determined by the law of supply and demand, "for if men did not need one another's goods at all, or did not need them equally, there would be either no exchange or not the same exchange." To obviate the difficulties of determining how many objects of one sort are worth how many of another, money is set up by law as a medium of exchange. Thanks to it, it becomes easy to evaluate in terms of one another objects in themselves incommensurate. For example, it would be puzzling to say off-hand how many beds one ought to pay for a house. But if a house is worth half a certain sum and a bed a tenth of it, obviously the house is worth five beds either in kind or in money value. Money, then, measures all things, makes them comparable, and thus facilitates bartering.[110]

Justice in the sense of fairness, taken as one virtue among many, is subject like the others to the rule of the mean. It differs, however, from other particular virtues in that both its extremes have the same name "injustice," and can be superimposed upon one another in the same person. Thus, the unjust man strives to have both more and less than is fair—more

[109] V, 2, 1130*b*, 30–4, 1132*b*, 20.

[110] V, 5, 1132*b*, 21–1133*b*, 28.

of the world's goods and less of the unpleasant things of life than is his due.[111] What his due is, or in other words what is fair, is determined by the law and those that enforce it. Incidentally, the just judge, though the interpreter of the law, does not take more than the law allows him. If he does, he turns from a guardian of the law into a tyrant.[112]

Since justice is essentially a relation between people naturally subject to law, and since these are people who have an equal share in ruling and being ruled, there can be no such thing as injustice in the unqualified sense towards things that are one's own, like wife or children or slaves. Still, since one's belongings are part of oneself, no man will choose to treat them unjustly. By so doing he would be unfair to himself. This may be called household, in contradistinction to political justice.[113] Political justice, however, is also not without its ups and downs. There is, to be sure, such a thing as natural justice "which has everywhere the same force and does not exist by people's thinking this or that," though even this may slowly change. But natural justice is overlaid by things that are just by convention and expediency and legal enactment. And political justice of this sort is wholly relative to time and place.[114]

Finally, the inability of justice to accommodate the universal rule or law to the particular case gives rise to the distinction between justice and equity. Equity is indeed no better than absolute justice (which would judge each case on its merits), but it is better than ordinary legal justice, and it steps in to correct the law where the latter "is defective owing to its universality." The equitable man, then, will be one who is "no stickler for his rights in the bad sense, but tends to take less than his share though he has the law on his side." In other words, he will be scrupulously fair when the law does not compel him to be so, or even when it permits him to act unfairly.[115]

So much for the external side of justice. When all is said and done, however, the justice or the injustice of an act will

[111] V, 5, 1133*b*, 29–1134*a*, 16.
[112] V, 6, 1134*a*, 17–1134*b*, 8.
[113] *Ibid.*, 1134*b*, 9–18.
[114] V, 7, 1134*b*, 18–1135*a*, 5.
[115] V, 10, 1137*a*, 31–1138*a*, 3.

depend upon the agent's intention or will. An involuntary act is only incidentally just or unjust, whether it is involuntary through ignorance, or from lack of power, or from compulsion. An unjust act done in ignorance of its consequences occurs by accident, and the resulting injury it inflicts, being contrary to reasonable expectation, is called a misadventure. Where the consequences are foreseen but the agent is careless, we have a mistake or act of negligence. Where the agent acts with knowledge but hastily, from passion and without deliberation, the act is unjust but does not necessarily imply that the agent is of unjust disposition. If, however, it is committed from choice, not only is the act unjust but the agent also is a vicious character.[116]

This insistence upon the *intention* of the agent as the ultimate factor in deciding the justice or the injustice of an act brings us back to a point of great importance, already discussed by Aristotle at length, but so far almost entirely overlooked by us in our haste to sample the virtues and their attendant vices, and to verify the doctrine of the golden mean. We have, to be sure, been vaguely aware of the existence and nature of this other side of the moral life even before it forced itself upon our attention in the chapter on Justice. We have casually noted from time to time that deliberation and purpose play a leading part in virtuous activity. It behooves us now to retrace our steps as far as the beginning of the third book and join Aristotle there. It may already have occurred to us that deliberation, purpose, intention, choice, and the like all imply a single word, *will*. So it will not surprise us to find Aristotle engaged in studying the voluntary and involuntary aspects of activity and already involved in such difficult problems as those of freedom and moral responsibility.

Obviously, he tells us, the question of virtue and vice enters into our activities only when those activities are what we call *voluntary*. We are neither praised nor blamed nor held to moral account for acts that are involuntary on our part.[117] What then is the earmark of a *voluntary* act? We can best answer this question by the negative expedient of determining

[116] V, 8, 1135*a*, 15–1136*a*, 9.

[117] III, 1, 1109*b*, 30 ff.

the nature of the *involuntary.* Now, an involuntary act may be defined roughly as one done under compulsion or because of ignorance.[118] But such a definition demands further analysis. In the first place, compulsion is a somewhat vague term. Is a man who is terrified into base behavior by a threat, or who sacrifices his honor in order to save others, *compelled* to act as he does? Here we have a person, free from physical compulsion and master of his own movements, unduly influenced to choose at the moment a course of behavior he would never choose in general. In such situations we have at the best a curious mixture of the voluntary and the involuntary.[119] So far as compulsion is concerned, then, an act, to be wholly involuntary, must be such that its moving principle is entirely outside the actor, "being a principle in which nothing is contributed by the person who is acting or feeling the passion, e.g., if he were to be carried somewhere by a wind, or by men who had him in their power."[120] Conversely, a truly voluntary act is at least one "of which the moving principle" is wholly "in the man himself."[121]

Pleasure and pain, however, and, generally speaking, the motives that determine a man's behavior for good or bad are not to be reckoned as external forces compelling him from the outside. They are rather part of "the moving principle in the man himself," and they cannot be invoked for the purpose of evading moral responsibility.[122] The same is true of the passions and appetites.[123] Indeed, the inner drive of the organism towards the ends imposed upon it by its own nature is the most voluntary thing in the world. If we are "forced" by what seems good and pleasant to us, if the impulse to self-realization is a foreign yoke, then all acts are compulsory, and the distinction between the voluntary and the involuntary breaks down. In short, self-determination is not compulsion.[124]

118 III, 1, 1109*b*, 35 ff.
119 *Ibid.*, 1110*a*, 5–19.
120 *Ibid.*, 1110*a*, 35 ff.; *cf.* 1110*b*, 1 ff.
121 *Ibid.*, 1110*a*, 15 ff., 1111*a*, 22 ff.
122 *Ibid.*, 1110*b*, 9 ff.
123 *Ibid.*, 1111*a*, 24 ff.
124 *Ibid.*, 1110*b*, 9 ff.; *cf.* Stewart, *Notes*, I, pp. 233–234.

Turning now from compulsion to ignorance as a determinant of involuntary action, we find an even more complicated situation. In the first place, we have to make a distinction between involuntary and non-voluntary behavior. No deed that is committed by reason of ignorance is willed in the moral sense of the word. It is not a voluntary act. But it is not an *in*voluntary act or, in other words, an act that is *against* our will, unless we feel pain and repentance when we realize what we have done.[125] Again, acting *in* ignorance is not the same as acting *from* ignorance. For instance, what a man does when drunk or in a passion is done *in* ignorance, for the agent is temporarily blinded to the nature and consequences of his deed. But it is not done *from* ignorance, since not ignorance but rage or intoxication is the cause of the agent's acting as he does.

This distinction is important because acts done *in* ignorance are not necessarily involuntary and pardonable, whereas acts done *from* ignorance generally are. Thus all evil is committed *in* ignorance, seeing that every evil-doer, being blind to what is best for him, "is ignorant of what he ought to do and what he ought to abstain from." Furthermore, the wicked man may be said even to act *from* ignorance of general moral principle. But such ignorance is no excuse, for he knows well enough the particular circumstances and consequences of his particular evil deed, and therefore commits it *voluntarily*. It is only acts resulting *from* ignorance of the *particular* circumstances and objects with which they are concerned that can be called *involuntary*, and can be pitied and pardoned rather than punished. These circumstances, to be sure, are so numerous that no man can be expected to be ignorant of them all. But ignorance of the important points, if coupled with pain and repentance on discovering the mistake, is sufficient to mark an act as involuntary and to exculpate the agent.[126]

Just, then, as our consideration of the nature of compulsion led us to define voluntary action as "that of which the moving principle is in the agent himself," so our discussion of ignorance suggests that we add to our description the clause "he being

[125] III, 1, 1110*b*, 18–1111*a*, 21. [126] *Ibid.*, 1110*b*, 18–1111*a*, 21.

aware of the particular circumstances of the action."[127] But, now, a moving principle that, in the face of a particular set of circumstances, determines itself to this or that course of action feels what we call *preference* and exercises what we call *choice*. This factor plays an important part in virtuous activity, since action that embodies the golden mean must be expressly intended or chosen for that purpose if it is to have moral value.[128] To stumble upon the mean by chance or with something else in mind, or to have it forced upon us by circumstances over which we have no control, is in no wise to our credit.

We must, however, be on our guard against identifying with voluntary action in general the selective activity of having preferences and expressing them in choices. Preferential choice is, to be sure, a voluntary thing, but it is not so wide in its scope as voluntary action. The inconsequential behavior of animals and children, for example, and, for that matter, anything done by adults on the spur of the moment may be voluntary enough, but such action cannot possibly be said to exhibit intention and choice. Nor can the selective activity of choice be a form of appetite or of "temper," since appetite is motivated by pleasure and pain—which "choice" is not—and since both desire and bursts of passion are characteristic of irrational creatures and of incontinent men, who only too evidently do not pick and choose their acts.[129]

Again, the preferential aspect of choosing cannot be identified with mere wishing. We may wish for the impossible, as, for example, to be immortal, or for things that our own efforts cannot bring to pass. But preference, properly speaking, is concerned only with the possible, and at that with things we feel that we personally can accomplish. Moreover, even thus narrowed down, it deals only with means. We do not select the ends for which we work; they are given us by our nature and are what we naturally wish for. Our picking and choosing is done rather among the different possible ways of attaining these ends. Finally, preferring is more than holding an opinion. Opinion, like wishing but unlike selection, may deal with the

[127] III, 1, 1111*a*, 22 ff.
[128] III, 2, 1111*b*, 30 ff.
[129] *Ibid.*, 1111*b*, 4–19.

impossible or with the necessary and the unavoidable. Nor does it get us anywhere or have any influence upon our character, as our preferences do. Opinion is a matter of truth or error, preference of right or wrong. And sound opinions are compatible with vicious choices.[130]

What, then, is the distinguishing mark of preference and choice? The answer is simple. Activity, to be called selective, must be the outcome of reasoning and deliberation. Hence choosing is not identical with volition or appetite or passion, or with wishing, or with holding one opinion rather than another. For whatever our opinions or wishes, or our appetites or passions may be, we do not deliberate about the order of nature or mathematical truths or chance events, but only about human affairs, and, even with respect to them, only about such things as concern us immediately and can be changed by our efforts. Nor do we deliberate about ends, but about means, and about these only when the situation is obscure or its outcome uncertain. In that case we investigate, and analyze, and even turn to others for advice. Confronted with the impossible or the inevitable, our investigation and our effort cease. But in dealing with the possible or the avoidable our deliberation comes to a head in a definite desire, and we act in a manner calculated to satisfy it. An act of this sort is a *choice*. Choice, then, we may finally define as "deliberate desire of things in our power."[131]

The confinement of virtue to such voluntary activity as is deliberately chosen by us and as deals with things in our power has interesting results. In the first place, it reveals the basis of Aristotle's contention that virtue is not the good, and of his objection to the Cynic doctrine that morality is an end in itself, and that virtue is to be practiced for its own sake and regarded as its own reward. The fundamental weakness of Antisthenes' teaching is now seen to lie in a hopeless confusion of ways and means with ends. The reason that virtue is not the good is that it is not an end but a means. "The exercise of the virtues," Aristotle explicitly states, "is concerned with means,"[132]

[130] III, 2, 1111*b*, 20–1112*a*, 13.
[131] *Ibid.*, 1112*a*, 13–5, 3, 1113*a*, 11.
[132] III, 5, 1113*b*, 5.

and with means alone. But means are not desirable for their own sake. In other words, virtuous behavior has no intrinsic goodness. It is merely a device, valueless apart from the ends it subserves, that an organism constituted and situated like ours must employ in order to attain its good and be happy.

We may also put virtue in its proper place, if we approach the question from the point of view of the ends that correspond to our wishes and determine what our good shall be. Obviously these ends and wishes transcend altogether the sphere of virtue. We do not hold ourselves responsible for them, or blame or praise ourselves for having them. We do not choose them. It is not in our power to alter them. We can, for example, no more help wishing to be healthy and happy than we can help being men.[133] Our wishes and the good they constitute are natural facts inseparable from the kind of body, passions and parts, interests and instincts with which the human animal comes endowed. There is, then, no virtue and no vice in our being what we are and wishing what we do. Virtue and vice, choice and responsibility, moral judgments of right and wrong, pertain not to the dictates of our nature but only to the method we employ in giving effect to them. And they pertain to the method simply because that seems to be something within our choice and power. Though there can be no question of what our good shall be, whether and how it shall be obtained appears to be an open question for each one of us. For it is within our power, apparently, to decide whether to act or not to act and whether to act well or ill.[134]

But this is by no means the whole story. We are not done with virtue yet. Two difficulties present themselves, one of which is formidable. Taking the lesser first, we may note that the distinction between *wish* as directed towards *ends*, which are *good*, and *choice* as concerned with *means*, which are *virtuous*, bids fair to land us in a dilemma. It replunges us into the old dispute between Plato and Protagoras with regard to the nature of the good. We must ask ourselves whether our will is directed towards a real, objective good, as Plato held, or merely towards what *seems* good, as the Sophists taught. If we side with Plato

[133] III, 2, 1111*b*, 26 ff. [134] III, 5, 1113*b*, 3 ff.

and make the object of wish a good in itself, what are we to say of the good wished by the ill-intentioned man? The object of his will, surely, is not *the* good. Hence, we are forced to say either that his wish is not a wish, since it is not for *the* good, or else that what merely *appears* good is the end at which the will is really aimed.[135]

It looks, then, as if Protagoras were right. But if he is, we must take the consequences. "Those who say the apparent good is the object of wish must admit that there is no natural object of wish, but only what seems good to each man." And not only different, but even contrary things appear good to different people.[136] The effect of such a doctrine of virtue is plain, Aristotle might have added. If the wish of the individual is the final test of goodness, then, whatever his ends may be, the means he adopts to attain them will be virtuous. This is moral anarchy pure and simple.

Aristotle, however, declines to accept either the Platonic or the Protagorean extreme, and sets to work to rehabilitate a "natural object of wish" that shall be neither absolute nor yet purely relative. To this end he makes his old appeal to the healthy, normal man as representative of human nature in general. Each man, indeed, wishes what *seems* good to him. So far Protagoras is right. But what appears good to the good man sets a standard for judging the wishes and the seeming goods of all men, just as it is the way food appears to the taste, and the impression it makes upon the digestion, of the well rather than the ill man that determines whether it is really wholesome or only apparently so. Although, then, all objects of wish appear to be good to those who wish them, they are not all on a par morally and equally authoritative. "Each state of character has its own ideas of the noble and the pleasant," . . . but "the good man judges each class of things rightly, and in each the truth appears to him." Hence he is "as it were the norm and measure of them," and what he wishes constitutes a true, as opposed to an apparent, object of wish in the moral sense of the word. The root of moral error and evil, Aristotle points out, lies in the false perspective introduced into our

[135] III, 4, 1113*a*, 15 ff. [136] *Ibid.*, 1113*a*, 20 ff.

wishing by pleasure and pain. "In most things," he says, "the error seems to be due to pleasure"; for although "it appears a good when it is not," . . . we continually "choose the pleasant as a good, and avoid pain as an evil."[137]

The case of the apparent *vs.* the real good may, then, be regarded as satisfactorily compromised, though the question how to know the good man from the bad man is not finally settled. But before carrying this point to a final court of appeal, we have a second and more important matter pending, suggested by the distinction between wish and choice. We have talked of our wishes as natural endowments which it is not in our power to dodge or change. As we have seen, we can no more help wanting to be healthy and happy than we can help being human. Our ends are shaped for us along with our natures. But the choices we make with respect to the means for putting these ends into effect, and the acts with which we hew them rough or smooth, for better or for worse, are in our power, Aristotle repeatedly maintains. They are not made or done under outer compulsion. We are responsible and can be held to account for them, and we can be justly punished or rewarded for them according as they are bad or good. At this point, however, a suspicion arises. Are we so sure after all that our choices are free? May they not be forced upon us by factors we cannot control? Perhaps we are clay in the hands of circumstance. Perhaps, in the process of deliberation, with its weighing of pros and cons and its eventual settling of the balance to a decision, we merely hold the scales, unable really to exert an ounce of pressure on either pan, while the wavering of opposed ideas and motives gradually subsides to an equilibrium predetermined by their comparative gravity. In that case, what of moral responsibility, praise and blame, and the justification of reward and punishment?

This question is foreseen by Aristotle and his reply is ready. In meeting the issue and in defending the freedom of the will, he does not, however, proceed to the length of maintaining, like some later metaphysicians, that if we are to be really free and

[137] III, 4, 1113*a*, 23 ff.; *cf.* Stewart, *op. cit.*, I, pp. 269 ff.

responsible it must be in our power to act, not only uncompelled by external circumstances, but undetermined, even, by ourselves and irrespective of the kind of people we are. He apparently believes, to be sure, that a freedom of this sort exists in Nature. In the activity of any being tainted with Potentiality and Matter there can be no telling which way the cat will jump. No matter, then, how trustworthy we may look, and how predictable our behavior may seem, the alternative of not acting at all, or of not acting as might reasonably be expected, is always open to us, metaphysically speaking, and may give rise to behavior that, being without antecedent causes, can be traced to nothing and, absolutely speaking, could not have been foreseen.[138]

In the *Ethics*, however, freedom of this sort plays almost no part. There is, indeed, as we shall see in a moment, one passage in which Aristotle seems to approach it. But he does not pursue the subject or develop its possible moral implications. In order to establish moral responsibility it is sufficient in his eyes that we do not seem to ourselves wholly passive beings, merely registering and transmitting the impact of external forces, but feel as if we were "moving principles" as well, the real sources and causes of much that we do. Where our activities are such that they have the "feel" of proceeding from and expressing ourselves, we are not acting under compulsion but freely. And for any deed that we own up to as ours we are morally responsible. In a word, for Aristotle the question whether or not it is in our power to act is answered in each individual case by simply determining whether at the moment we feel ourselves or external circumstances to be the causes of the act in question. The answer does not involve any metaphysical delving into what the "we" in us really is, or further querying whether this "we" could, being what it is and confronted with the situation in question, have caused other than the effects it did.

Taking then "in our power" to mean "of which the moving principles are in us," it is plain that our choices are in our power, or, in other words, originate in and express ourselves,

[138] *De Int.*, 9, 18*b*, 31–19*a*, 21.

and hence that virtue and vice, which have to do with choosing the means to the end, are also in our power. In this respect, Aristotle points out, virtue and vice stand and fall together. We are as much the "moving principle" of our evil acts as we are of our good.[139] We cannot hold, as Socrates did, that whereas virtue and happiness are voluntary, every man who does evil acts from ignorance of what is to his best interests and hence against a will, which, when left to itself, is always for the good. The Socratic conclusion that "no one is voluntarily wicked" is wrong. "Wickedness *is* voluntary."[140] The attitude of the law and of society, the use of punishment as a deterrent, the employment of devices to encourage virtue, all rest upon the assumption that our deeds are our own doing and not the effects of outside causes.[141]

Moreover, so far as ignorance is concerned, there is, as we have already seen, much ignorance of which the individual himself is the cause and for which he is responsible. For instance, a man is responsible for what he does in the ignorance induced by drunkenness, since he does not get drunk under external compulsion but of himself. It lies with him, and with him alone, whether to get drunk or not. The same is true of the ignorance that springs from carelessness, as for example ignorance of the law. Ignorance of this sort is not forced upon the individual. Nothing except himself prevents his being careful. Therefore he has "the power of taking care" and is alone responsible for not exercising it.[142]

But, it may be argued, and here Aristotle reaches the crucial question, "perhaps a man is the kind of man not to take care."[143] Given his character, he must act as he does. Is he, then, responsible for being the kind of man he is? Is he not, like the man acting in ignorance or under compulsion, more to be pitied than blamed? To this difficulty Aristotle has his answer ready. It is true, he admits, that once a character is formed it cannot be changed and must express itself as it does. Nevertheless, that character, be it good or bad, is still the sole "mov-

139 III, 5, 1113*b*, 3–14.
140 *Ibid.*, 1113*b*, 14–21.
141 *Ibid.*, 1113*b*, 22–30.
142 *Ibid.*, 1113*b*, 30–1114*a*, 3.
143 *Ibid.*, 1114*a*, 3–4.

ing principle" of its self-expression in action. The righteous man, with whom virtue has become a fixed habit, does not feel that his good behavior is for that reason compelled and involuntary. He wants to be good, and in being good he feels free. So, too, the hardened criminal is vicious voluntarily, for "it is irrational to suppose that a man who acts unjustly does not wish to be unjust, or a man who acts self-indulgently to be self-indulgent." Nay more, once the character is set, the wish to reform is unavailing. A man's nature will go on expressing itself in acts for which he may be sorry, but of which he will be bound none the less to admit himself "the moving principle," and for which he will therefore be responsible. Wherever, then, character comes from, however it is formed, and whatever it turns out to be, it is still the free cause of its actions and cannot shift the reason for its behavior to anything outside itself.[144]

Moreover, characters do not come starched and folded. They are pliable and capable in the beginning of being shaped in one way or another. Habits are slowly formed by the repetition of individual acts. "It is activities exercised on particular objects that make the corresponding character." Hence the individual is clearly responsible for becoming and being what he is, since "not to know that it is from the exercise of activities on particular objects that states of character are produced is the mark of a thoroughly senseless person."[145] The man, then, who becomes a drunkard or a cheat is himself responsible for his downfall. By a succession of particular acts of a certain sort, to which he is not forced by outer compulsion, and which he does not commit in ignorance of their consequences, he builds up the kind of general character of which these acts become the habitual, but none the less unforced and therefore free, expression.[146] He is in the same boat as the patient who might have obeyed his doctor's orders and kept his health, or who might have retained his figure by exercising, but now finds it too late. Once it was open to the patient not to be ill or fat, but now he has thrown away his chance. The

144 III, 5, 1114*a*, 11–21.
145 *Ibid.*, 1114*a*, 4–10.
146 *Ibid.*, 1114*b*, 30–1115*a*, 3.

die is cast and cannot be recovered. Still, throwing away his chance was his own act, and was in his power, since "the moving principle" that did the throwing was in him. We do not *pity* such a man as we would one born ugly or blind or with some other bodily vice. We *blame* him on the ground that he was not determined by anything outside himself, or, in other words, was not forced to neglect his health and his appearance and to let himself go as he did.[147] In the same way we blame men of vicious character as "themselves by their slack lives responsible for becoming men of that kind."[148] For "it was open to them at the beginning not to become men of this kind, and so they have become unjust and self-indulgent voluntarily; but now that they have become so it is not possible for them not to be so."[149]

But, we may still persist in asking, was it really *ever* open to the wicked to be other than wicked? Is the evil man really like the man who has deliberately drunk himself blind? Is he not rather like the man born blind? Does he not come with a naturally defective moral eye which constitutionally mistakes an apparent for the real good and makes him morally color-blind? Aristotle's answer to these questions is negative. It may be that "the end appears to each man in a form answering to his character," but in so far as he is "somehow responsible for his state of mind, he will also be himself somehow responsible for the appearance."[150] In other words, we can be taken to task for holding the ideals we do. The vicious man cannot beg off on the ground that he did what seemed to him good and that he ought not to be blamed for acting according to his lights. He had no business to have those lights. He, and nothing outside himself, is the cause of his defective vision and his wrong standards, which are the fruit, as his character is the flower, of repeated evil acts individually subject to his control. If this were not the case, we should be obliged to say that neither was the good man responsible for his virtuous character and high ideals and deserving of credit for them. For "to both men alike, good and bad, the end appears and is fixed by Na-

147 III, 5, 1114*a*, 10–31.
148 *Ibid.*, 1114*a*, 4–6.
149 *Ibid.*, 1114*a*, 19–21.
150 *Ibid.*, 1114*a*, 31–1114*b*, 3.

ture, or however it may be, and it is by referring everything else to this that men do whatever they do." [151]

Indeed, suppose even that there was no "however it may be," and the end really was fixed once and for all by Nature. Suppose that a man came naturally clothed with ready-made low ideals which could not be refitted and for which we could not hold him responsible. Even in that case, Aristotle feels, we could still hold him to account for acting in accordance with them. For, even if he could not help his ideals, it would still rest with him whether to adopt or not to adopt the means for realizing them, just as being born with high ideals would not deprive the good man of the power to act unrighteously. Once more, to deny freedom to the sinner is to deny it to the saint. If vice is involuntary, so is virtue. From every angle the Socratic teaching that vice is involuntary is untenable.[152]

It must be obvious that in developing this final argument for the voluntary nature of vice Aristotle begins to contradict himself and veer towards a new concept of freedom. Roughly speaking, something akin to what we should to-day call the freedom of self-determination underlies his theory of a give and take between the particular act and the character, in the course of which the character, as it is slowly formed by the repetition of self-originated acts, little by little colors the inner source of those acts, till in the end they must always express the disposition they have helped build up. But the statement that our "moving principles" may move and make their choices undetermined by their own natures and ideals, no matter how fully formed, introduces a new twist into the discussion. It looks as if moral accountability now implied to him more than a feeling of freedom from outside interference and control, and more than a sense of the origination, ownership, and direction of our behavior by our own characters, and involved the notion that we were never wholly committed by our natures to action of a given sort. Confronted with a choice we may, he seems to think, act independently not only of external forces but of our own characters. We may defy and disobey even *ourselves*.

If anything of this sort were really in Aristotle's mind, he

[151] III, 5, 1114*b*, 6–15.

[152] *Ibid.*, 1114*b*, 16–25.

might be accused of veering for a moment towards the concept of the so-called "free will of indifference"—or view that, however much we may be predisposed by our inclinations and characters to one course of action rather than another, this predisposition does not absolutely predetermine what we are about to decide and do. Up to the last instant, according to this theory, we remain suspended in a state of metaphysical "indifference" between alternatives, and even then the weight of what we have become and what we are is insufficient to tip the scale. Something quite new must be thrown into the pan, originating, to be sure, within us, yet originating undetermined by anything that we were prior to the throwing. Of all metaphysical feats, not excluding creation by fiat, this is most like a magician's trick, and it is not surprising that speculation as to what does the throwing in these circumstances, and how the throwing is done, should have created one of the most difficult of modern metaphysical puzzles.

It is only fair to say, however, that the free will of indifference was not a problem entertained or even suggested by Greek religion or Greek ethics. It was largely a by-product of Christian theology, and but for Christianity might never have plagued philosophy. Even at Aristotle's nearest approach to the question we may doubt whether it ever occurred to him in its modern form. Had he been confronted with the possible implications of his statement, he might either have recoiled from attributing to it any such significance, or, as we have already noted, he might have seen in freedom of this sort just one more symptom, along with chance, contingency, and the thwarting of purpose by intractable matter, of the presence of Potentiality everywhere in the world. Falling short, as our souls do, of pure actuality, our "moving principles," he might have said, cannot be expected to be free from the possibility of not moving as well as moving, and of not moving entirely in accordance with their natures and ends when they do move. Liberty like this, however, carries us beyond both the sphere and the necessities of moral action into the realm of metaphysics. But there we look in vain for any discussion of it on his part, and hence are without any clue as to exactly how he

would have worked it in with contingency, chance, spontaneity, and the other traces of the cloven hoof of the Potential. We may, therefore, content ourselves with echoing the remarks of the critics that Aristotle's treatment of free will is inconclusive, judged by modern standards and demands, but quite sufficient according to his own.[153] Let us drop the subject for good and all, and turn back to the main object of our research which is still unattained. Since virtue and vice have proved to be equally voluntary, our digression into free will has not enabled us to answer the still pressing question—how to tell the one from the other.

We are, however, on the last lap of our race. As we enter upon it let us review briefly in our minds the ground we have already covered. "Virtue," we have read as we ran, "is a state of character concerned with choice, lying in a mean, i.e., the mean relative to us."[154] All these aspects have been gone over in some detail. We have studied the complicated nature of the mean that is golden for human beings, and seen how difficult it is to spot and hold the middle course. And the subjective problems connected with deliberation and choice are still fresh in our memories. But we have not yet set up a standard for distinguishing the mean that is really golden from that which merely glitters, and for differentiating good choices from bad ones.

If we turn back to the definition of virtue just quoted, we shall find that Aristotle appends to it a clause in which the final secret is revealed. The mean that is golden relatively to us, and that is selected by right choice, "is determined by a rational principle, and by that principle by which the man of practical wisdom would determine it." Reason, to be sure, cannot alter or criticize the constitution of human nature. It cannot say that it is irrational for us to have the character, the end, and the good with which we come outfitted by virtue of being men. But it is the last court of appeal in determining how much is too great, and how much too small, an

153 For Aristotle on the freedom of the will *cf.* Ross, *op. cit.*, pp. 200 ff.; Zeller, *op. cit.*, I, pp. 230, 363, II, 114–118, 129; Stewart, *op. cit.*, I, pp. 222–229, 272–281.

154 I, 6, 1107*a*, 1–2.

amount of functioning to bring a given nature happiness, and in deciding upon the means best calculated to attain that golden mean. We must, then, have a look at the so-called intellectual virtues, which we have so far ignored, for there it is that the foundation of the moral virtues lies. Indeed, morality is essentially the application of reason to human conduct—the determination by means of reason of the right rule of living.[155]

Now the intellect, which grasps rational principles, is of two sorts and is occupied with two different kinds of objects. On the one hand, we have the contemplation of what is fixed and invariable—an activity that we may call scientific; on the other, the use of our brains with respect to the variable and passing occurrences of ordinary, every-day life—an activity that we may call deliberative and calculative. Calculative reasoning differs from contemplative in that it is not a pure spectator but an actor. Allied as it is with desire, it aims at an end and is a moving force. It desires and devises our happiness. Whereas, then, contemplative activity merely accepts or rejects things as true or false, calculative activity pursues or avoids things as good or bad. "What affirmation and negation are in thinking, pursuit and avoidance are in desire."[156]

There are three states or conditions of contemplative mental activity—scientific knowledge, intuitive reason, and philosophic wisdom. Scientific knowledge concerns itself with demonstrating what must follow necessarily, universally, and to all eternity from first principles. But these principles, as we have already seen in the *Logic* cannot be themselves demonstrated. They have to be grasped by reason in an act of immediate intuition.[157] When we cover the whole ground of what is necessary, universal, and eternal by combining intuitive knowledge of first principles with demonstrative knowledge of what necessarily follows from them, we have philosophic wisdom.[158]

The calculative activity of reason, which is concerned with the variable and the contingent, is twofold. When we use our

155 *Cf.* VI, 1, 1138*b*, 18 ff.
156 *Ibid.*, 1138*b*, 25–1139*b*, 4.
157 VI, 3, 1139*b*, 13–35; 6, 1140*b*, 31–1141*a*, 8.
158 VI, 7, 1141*a*, 9–1141*b*, 8.

intelligence in "contriving and considering how something may come into being," and plan how to *make* something, we display *art.* Every art, whatever it may be, boils down to "a state of capacity to make, involving a true course of reasoning." Conversely, all lack of artistry betrays at bottom a false course of reasoning.[159] But now, we plan not merely how to *make*, but how to *do* or behave with respect to an end or good of some sort. When our contriving is directed towards *behavior* we are said to exhibit *practical wisdom.* That there is a real distinction between these two aspects, and that morality is not an art, is obvious from the fact that whereas the artist can produce bad works and still be called an artist, a man cannot produce bad "doings" and remain moral or practically wise. Moreover, while it is to the artist's credit if he knows that his work is poor, it is to a man's discredit to do wrong with his eyes open. Ignorance condemns in the one case, excuses in the other.[160]

Taking up *practical wisdom* we note in the first place that it must be distinguished from mere ingenuity in dealing with details—such as how to be healthy or strong. It is rather reasoning "about what sort of things conduce to the good life in general."[161] Again, *practical wisdom* is to be distinguished from *political wisdom,* which deliberates about the good of the state, and from *legislative wisdom,* which plans good individual laws, and from the science of *household management.* These, indeed, may be akin to practical wisdom, or even forms and applications of it. But the term itself is reserved to "that form of it which is concerned with a man himself—with the individual," and with what the good life for the individual is.[162] Still, it is difficult to disentangle these forms from one another, since the good of the individual perhaps "cannot exist without household management or without a form of government."[163] Generally speaking, however, "practical wisdom" has a moral rather than a political or economic connotation.

Now, if we turn back to the contemplative activities of the mind, we shall find that they are excellent and "virtuous" in

159 VI, 4, 1140*a*, 1–23.
160 VI, 5, 1140*a*, 24–1114*b*, 30.
161 *Ibid.*
162 VI, 8, 1141*b*, 23–1142*a*, 11.
163 *Ibid.*

proportion as they apprehend the truth. Being true, then, is the "virtue" of scientific knowledge, intuitive reasoning, and philosophic wisdom; being untrue is their "vice." But "being true" is also the "virtue" of calculative reasoning, for good choice depends upon right desire, and the rightness of desire depends in its turn upon the real desirability, or, in other words, the *true* goodness of its object. Desire, to be good, "must pursue just what reasoning asserts."[164] This holds for the two forms of calculative wisdom, art and morality. Art as we have seen is *good* art in so far as its productions involve and reflect a *true* course of reasoning. And morality or practical wisdom consists in an ability to keep one's doings in accordance with truth and reason "with regard to the things that are good or bad for man." So, too, the goodness or excellence of such kinsfolk of practical wisdom and aids to moral conduct as calculation, understanding, and judgment lies in their obedience to logic and their constant contact with the truth.[165] We may, then, regard being true as the excellence or virtue of both parts of the intellect, contemplative and practical.[166]

In short, a sound ethics demands the constant exercise of reason in both theory and practice. Only reason, reflecting upon the make-up of the human organism, can formulate the good corresponding to that organism's needs and desires. And only reason can devise the best means for fulfilling them and for thus bringing the organism the happiness appropriate to its nature.

Since, however, practical wisdom deals with a nature that is variable and with a good that is relative, ethics is not susceptible, as we already know, of a scientific or metaphysical treatment. Intuitive reasoning, scientific demonstration, and philosophic insight have in one sense nothing to do with the subject. They do not even pretend to study the means to happiness.[167] However, in one respect practical wisdom exhibits an intuitive character. A man of sound judgment and ripe understanding will intuitively spot what ought to be done in a particular case without having to go through a preliminary process of argu-

[164] VI, 2, 1139*a*, 21 ff.
[165] VI, 9, 1142*a*, 31–11, 143*a*, 24.
[166] VI, 1, 1139*a*, 6 ff.
[167] VI, 8, 1142*a*, 23 ff.

ing the matter out with himself. In other words, he will intuit or perceive the particular moral significance of a given situation with the same immediacy as the intuitions of contemplative reason grasp, say, the principles of mathematics.[168]

Furthermore, there is a sense in which intuitive reasoning, scientific demonstration, and philosophic insight play a leading rôle in Aristotle's ethics. Though they may not indicate the nature of the means, which are relative to the particular human situation from moment to moment, they do indicate, in Aristotle's judgment, the nature of the end. The best life for man, as we saw in the *Metaphysics* and noted again in Book X of the *Ethics*, is the contemplative life. His highest activity lies in the vision of truth, and the most virtuous life consists in so arranging and subordinating the other operations of his nature that this activity may have the freest play and the completest possible expression. Philosophic wisdom, then, being the most excellent and "virtuous" state that contemplation can attain, is in itself happiness, and is therefore self-justified, quite apart from any "useful" consequences that may or may not flow from it. In the same way, the mere mental process of moralizing "about life is interesting in and for itself, whether or no it gives rise to virtuous deeds." There is a contemplative aspect to practical wisdom which would still make it valuable even if it were without practical applications. Philosophizing and moralizing, then, being the excellences or "virtues of the two parts of the soul respectively . . . must be worthy of choice . . . even if neither of them produce anything." That is Aristotle's first retort to those who would object that pure science and philosophical speculation are without utility because they "contemplate none of the things that will make a man happy" or, as we should say to-day, do not go in for economic, political, and moral reform.[169]

Moreover, Aristotle continues, both philosophic and practical wisdom really are productive. For surely anything in which man finds happiness, as he does in looking on at the spectacle of the universe and of human life, is productive in the highest sense of the word. Not only that, but wisdom about

[168] VI, 11, 1143*a*, 25 ff. [169] VI, 12, 1143*b*, 18–1144*a*, 2.

human affairs is also of practical use since moral theory is an efficient aid to moral conduct. It is all very well to say that the righteous man will act in accordance with his nature whether he knows his ethics or not, and that practical wisdom will improve neither a good nor a bad character. Nevertheless, the fact remains that practical wisdom helps the good man to take the right means to hit the right mark (the golden mean) at which his virtue is aimed. For that matter, it is impossible for a clever and able man to be truly good without exhibiting practical wisdom, seeing that morality is itself cleverness and ability displayed in the right way and direction; that is, as the good man displays them. Morality is syllogistic or logical thinking starting from the assumption that such and such is for the best—an assumption that only the good man can validly make. As well say the syllogism is of no use to clear thinking, when clear thinking *is* thinking syllogistically. Evidently it is impossible to be really good—that is, to hit the golden mean by the right means at the right time—without being practically wise.[170]

The relation of practical wisdom to cleverness in general is paralleled by that of the character we develop to the character with which we are born. We come into the world endowed with moral qualities in embryo. But, as in the case of general intelligence or cleverness, these native qualities may go to the bad unless they are educated in the right way. And their crystallization in a virtuous character is tantamount to displaying in the right way cleverness regarding problems of conduct, or in other words, to showing practical wisdom in what we do. Socrates, then, though he was wrong in his attempt to reduce all the different moral virtues to knowledge of the good, was right in his perception that they all implied practical wisdom and indeed involved its actual presence. Bravery and self-control are not knowledge, but without the aid of knowledge of the good they cannot be had in the precise amount that makes them virtues rather than vices such as rashness, or cowardice, or insensibility. So, too, Socrates was both right and wrong about virtue's being one. Our innate qualities or natural vir-

[170] VI, 12, 1144*a*, 6–37, 1144*b*, 30–32.

tues certainly are not one. Some of them may be given, others withheld, at birth. At the same time, to possess practical wisdom at all is to possess it with respect to all natural qualities and virtues. The "moral" attitude is the same, whether it be taken towards bravery or self-control or what not. In every case it involves a perception of the precise amount, neither more nor less, of natural virtue it takes to make a moral virtue. In the sense, then, that all native qualities become moral virtues by the agency of one and the same knowledge of the good and have one and the same formula, i.e., the golden mean, virtue is one.[171]

But we might still expect Socrates to be right in his contention that knowledge of the good should be followed automatically by virtuous action. If we know the end, and the means to the end, both of which, being good, are desirable, then our "moving principles," unless interfered with from the outside, ought to move accordingly. Still "this view plainly contradicts the observed facts."[172] Voluntarily and with our eyes open we are constantly acting against our better judgment, in defiance of the sense of certainty that accompanies not only actual knowledge but any sincere opinion.[173] What, then, lies at the bottom of this deflection of moral conduct from the obviously good and moral course?

The answer to this question Aristotle finds in what he calls "incontinence," to a discussion of which Book VII is devoted. This is not itself vice. Vice is its result. Nor is it a sub-human state like brutishness. Animals, like Gods, are neither virtuous nor vicious, but live without morality. Furthermore their acts are not subject to rules.[174] But continence and incontinence have a moral significance and exhibit a rule of action. The incontinent man is a man who *as a rule* lets his passions overcome his reason. And continence is considered akin to virtues like endurance and temperance, incontinence to vices like softness and self-indulgence. Continence may be defined as the habit of refusing on rational grounds to follow an appetite we know to be bad, incontinence as the habitual refusal, grounded

171 VI, 13, 1144*b*, 1–1145*a*, 6.
172 VII, 2, 1145*b*, 22–30.
173 *Ibid.*, 1146*b*, 24–27.
174 VII, 1, 1145*a*, 15–27.

in appetite and passion, to follow knowledge and opinion of whose goodness we are certain.[175]

Our question now becomes, by what machinery do appetite and passion manage to interfere with and block the control of action by reason? Ignorance—or, at any rate, ignorance as Socrates understood the word—is ruled out of the game. For incontinence is a *deliberate* flouting of the *knowledge* of good and evil. Still, it is clear that the knowing process must be distorted in some way, since if our moral reasoning were absolutely cogent we should have to act according to its conclusion. If I, for example, know that "everything sweet ought to be tasted," and that "this is sweet," then action must follow on affirmation, and I must taste the object in question unless I am prevented by something outside myself.[176] Where, then, and how does the distortion occur?

The answer Aristotle finds in the distinction between actual and potential knowledge. I can have knowledge without exercising it. I can, for instance, actually know that dry food is good for every man, that I am a man, and that food of a certain sort is dry, but I may not be certain at the moment that the food set before me is of the sort in question. In that case, although my syllogism is correct and my thinking clear, my action may not be in accordance with it.[177] But incontinence goes far deeper than this. Since it is action of a general sort in accordance with a rule, it, too, must have a logic and a syllogism of its own. And the victory of the dictates of passion over those of reason will not be irrational. It will arise from the fact that the *arguments* put up by appetite are stronger. Greek will be meeting Greek, syllogism will be clashing with syllogism. And the flaw will be a logical flaw.

Take once more the question of tasting a sweet food. Suppose I know on rational grounds that nothing of a certain sort should be tasted, and on perceptual and passionate grounds that everything of this sort is sweet and therefore pleasant. Here I have two equally strong major premises. Suppose furthermore I actually know that the thing before me belongs to

[175] VII, 1, 1145*b*, 8–21.
[176] VII, 3, 1147*b*, 25–32.
[177] *Ibid.*, 1146*b*, 35–1147*a*, 10.

the sweet and pleasant class, but have only potential knowledge, or, in other words, am uncertain, whether it is the sort of thing I ought to taste. Here I have two minor premises, but one of them is strong, the other weak. On logical grounds alone the syllogism with the two strong premises will lead to the affirmative conclusion and to action in accordance with it. I shall taste the thing in question. But it will be noted that what makes the minor premise practically strong or weak is the element of desire. For, if I did not *want* to taste the thing, my uncertainty as to whether it *ought* to be tasted or not would act as a deterrent rather than an incitement to my sampling it.[178]

Still, even when I am following my appetite, I shall be acting in a sense rationally because I am acting logically and syllogistically. Moreover, the rule that my evil act is following is only incidentally contrary to the right rule that governs moral behavior. As a formula of action, "be logical," it is identical with it. The incidental flaw occurs not in the form of the weaker syllogism, but in a false estimate and classification of the particular perceptual fact or act that forms the subject of the minor premise. I am uncertain as to its relation to my real good; I am certain as to its relation to my immediate desire; and appetite does the rest.[179]

To the extent, then, that action contrary to knowledge implies ignorance at this point, Socrates is right.[180] Just what would happen if the two syllogisms opposed to each other were both of them equally strong, and we were as certain that a given act ought not to be performed as that it would be pleasant to perform it, Aristotle does not say. In that case rational desire—the desire to do what is for our good in the long run—would be as sound as the desire of the moment, and a tussle would take place. But this point is left undeveloped here, though Aristotle in other passages frequently talks in terms of a conscious conflict between appetite and rational will in which there is no uncertainty as to the wrongness of what we want to do, but full consciousness of it. Furthermore, he is silent con-

178 VII, 3, 1147*a*, 10–1147*b*, 5.
179 *Ibid.*, 1147*a*, 10–1147*b*, 5.
180 *Ibid.*, 1147*b*, 9–19.

cerning the origin of this uncertainty when it does exist, and leaves the point quite unexplained.[181] Indeed, the inconclusiveness of the discussion and its dodging of the problem of the moral struggle between will and appetite have led some critics to suppose that this portion of Book VII was written, not by Aristotle, but by some one more in sympathy with the Socratic teaching.[182]

It is the syllogism concealed in incontinence that distinguishes it from brutishness. Animals, having "no universal judgments, but only imagination and memory of particulars," are incapable of consecutive thinking and syllogistic action of any sort.[183] And it is the weakness of its minor premise that differentiates incontinence from vice. The wicked man has no uncertainties regarding the propriety of his course. Nor is he haunted by the remorse that disturbs the merely incontinent man.[184] He is sure that the deed he meditates is to his best advantage and belongs in the class of things that should be done. He "is led on in accordance with his own choice, thinking he ought always to pursue the present pleasure; while the other (the incontinent man) does not think so, but yet pursues it."[185]

The wicked man, who indulges his desires unconscious of their moral bearing and under the illusion that they are all for the good, is incurable; whereas the merely incontinent man, who is conscious for the most part that some things ought not to be done and doubtful whether the act he has in mind may not belong among them, is curable. He may be weak and unable to stand by his conclusion half-hearted as it is, or, if he is keen and excitable, and quick and violent in his passions, his impetuosity may allow imagination rather than deliberation to guide him. But he is not as yet actually wicked. "For wickedness is like a disease such as dropsy or consumption, while incontinence is like epilepsy; the former is a permanent, the latter an intermittent badness."[186] But incontinence in

181 *Cf.* Ross, *op. cit.*, p. 224.
182 This is Cook-Wilson's view; *cf.* Stewart, *op. cit.*, II, p. 142.
183 VII, 3, 1147*b*, 3–5.
184 VII, 8, 1150*b*, 29–31.
185 VII, 3, 1146*b*, 19–24.
186 VII, 8, 1150*b*, 29–1151*a*, 5.

any one line of action may turn into a vice by becoming unconscious and chronic; just as when continence with respect to actions of a certain sort becomes habitual and unconscious, the uncertainty that leads to incontinent outbursts is overcome and dispelled, and a chronic state of good-temper or courage or temperance, or whatever the virtue may be, is established.[187]

Plainly continence and incontinence may be exhibited throughout a very wide range of activity. In fact, the weakness or strength of will they imply may exist wherever an activity may be carried to excess. We may, however, exclude from our discussion, though not altogether from the sphere of incontinence, excesses of activity that are brutish or morbid and not normally human, as for example, phobias of various sorts and abnormal appetites. It is difficult to draw the line between incontinence of this sort and simple human frailty at one end and out and out madness at the other.[188]

Furthermore, the exercise of continence and incontinence in matters of victory, honor, wealth, and the like, which arouse such passions as ambition, jealousy, and anger, is obviously of less moral significance than their exercise with respect to the bodily appetites. The irascible or inordinately ambitious man is considered a more reputable person than the libertine. For, after all, it is in pursuing things that are worth choosing in themselves that he allows his passions to run away with him; whereas the libertine abandons himself to an immediate pursuit of pleasures that are not worth choosing—or, for that matter, avoiding—but are simply to be accepted in so far as they accompany the natural functioning of the body. Indeed, we do not regard the ill-tempered or the over-ambitious man as actually *wicked*, although we do regard ill-temper or too much ambition as bad and to be avoided.[189]

Strictly speaking, then, we use the terms continent and incontinent of a man's attitude towards sensual pleasure. His corresponding attitudes towards physical discomfort and pain we call respectively endurance and softness. Endurance is not

[187] *Cf.* Ross, *op. cit.*, p. 225.
[188] VII, 5, 1148*b*, 15–1149*a*, 24.
[189] VII, 4, 1147*b*, 20–1148*b*, 14; 6, 1149*a*, 24–1149*b*, 26.

the same as continence because the attitude the good man assumes towards pain is the purely defensive one of resistance, whereas towards pleasure he takes the offensive and wins a victory over it. Endurance, then, is to continence as resisting is to conquering.[190] Finally, we may note that a man may be too continent and take less interest and "delight than he should in bodily things," just as he may be too temperate, and more frigid and ascetic than a truly good man ought. Continence, then, like virtue, is really a mean between extremes. This is not obvious at first sight, since over-continent like over-temperate men are so rare as to be negligible. Hence continence is popularly thought to be contrary only to incontinence, as temperance is commonly supposed to be contrary only to self-indulgence.[191]

Had Aristotle lived to-day, he could not have dismissed excessive continence and temperance so lightly. The attitude of negating most of life, and the vice, as he would have accounted it, of abstinence would have stood out in almost as glaring a contrast to the golden mean of moderation in all things, and would have deserved as much comment, as incontinence and the vice of self-indulgence. Indeed, to us the striking thing about the Aristotelian ethics is its humanity and its freedom from the moral dualism that at times rendered Plato's thought turgid, and that has muddied and still muddies so much of our modern thinking. The nearest that Aristotle ever comes to breaking up the unity of human nature and dividing it into two alien and hostile camps, one good, the other evil, is his distinction, with which we are already familiar, between the contemplative and the practical or moral activities, and his assertion that the life of the detached thinker is "higher" than that of the man of action and practical virtue.[192] We are, to be sure, warned against "those who advise us, being men, to think of human things, and, being mortal of mortal things," and we are exhorted "so far as we can to strain every nerve to live in accordance with the best things in us."[193] But this, it should be carefully noted, is not a warning, of the sort to which we are

190 VII, 7, 1150*a*, 23–1150*b*, 17.
191 VII, 9, 1151*b*, 23–1152*a*, 6.
192 X, 7, 1177*a*, 12–1177*b*, 26.
193 *Ibid.*, 1177*b*, 31–1178*a*, 3.

so accustomed to-day, against allowing, *within* the sphere of ethical conduct, an essentially low and immoral set of propensities to overcome a set that is essentially noble and high. It is rather a warning, of a kind quite novel to our modern ears, against rating too highly any life, however noble, that is merely moral and devoted to righteousness alone. All activity in accordance with moral and practical virtue, however excellent it may be of its kind, is a human and a mortal thing. It befits only our human estate,[194] and attaches us to our peculiar type of organism and needs, and to the ends and ideals prescribed by our particular nature and situation.

But *within* the sphere of such activity there is no hard and fast cleavage between a lower and a higher. There is no pitting, for example, of the body against the soul, of the world and the flesh against a principle essentially opposed to them. On the contrary, Aristotle expressly tells us that some of our greatest moral virtues "seem even to arise from the body, and virtue of character to be in many ways bound up with the passions. . . . Being connected with the passions also, the moral virtues must belong to our composite nature; and the virtues of our composite nature are human; so therefore are the life and happiness which correspond to these."[195] Furthermore, practical wisdom, which determines "rightness in morals," is linked to this virtue of character, which in its turn is determined by the kind of organisms we are, and by the kind of body, passions, and parts we possess.[196] Far, then, from undermining human goodness and happiness, the flesh underpins them. And so far as the world is concerned, the goods it provides are, as we have recently seen, an aid, not a detriment, to the exercise at its best of virtuous activity.[197]

Nor is there any consolation for the confirmed dualist in the Aristotelian opposition of the contemplative to the merely moral life. Even this attenuated and innocent dualism is minimized, from whichever direction we approach it. So far as

[194] X, 8, 1178*a*, 9–10.
[195] *Ibid.*, 1178*a*, 9–23. The order has been slightly changed.
[196] *Ibid.*, 1178*a*, 9–23.
[197] *Ibid.*, 1178*b*, 33 ff.

contemplative activity is concerned the human thinker is still a human being. Only in God does the intellect operate, as it were, *in vacuo*, independent of a given moral basis and bias. So detached an operation "would be too high for man."[198] The devotee of the contemplative life, then, is not to think at the expense of his humanity and of his practical and moral activities. He is not, as is sometimes urged upon the Platonic philosopher, to look upon the flesh and the world, with which his human nature is bound up, as a prison or a tomb in which "the best thing in us" lies fettered and constrained against its nature. He is not to become a recluse, an ascetic, or even a puritan in morals. To do so would be suicidal, since it would involve the destruction, or at least the mutilation, of the very nature by which alone the activity of contemplation can be exercised so far as human beings are concerned. And what could be more absurd and unreasonable than the spectacle of a reason, however pure, gravely and deliberately sawing off between itself and the supporting trunk of the physical world that very branch of the tree of life to which it must cling if it is to live!

Reason, in the interests of its freest, most detached, and most scientific use, bids rather the human being in whom it is lodged to assert the unity of his composite organism and to make the most and the best of all his functions. For, as Aristotle hastens to point out, "our nature is not self-sufficient for contemplation, but our body also must be healthy and have food and other attention."[199] Nay more, even a modicum of external prosperity is necessary to the best exercise, not only of the human, but of the divine within us. External conditions and practical affairs are not, to be sure, needed as the objects of contemplative thought. "The man who is contemplating the truth needs no such thing, at least with a view to the exercise of his activity; indeed they are, we might say, even hinderances, at all events to his contemplation." Nevertheless, the scientist and the philosopher, however absent-minded, is still a man, and "in so far as he is a man and lives with a number of people, he chooses to do virtuous acts; he will therefore need

[198] X, 7, 1177*b*, 26–27.

[199] X, 8, 1178*b*, 33–35.

such aids to living a human life" [200] But, because of the superior compensations enjoyed by the detached spectator of truth, that need will not be so marked as it is for those entirely given to practical affairs and the performance of moral acts.[201]

The unity, to all intents and purposes, of man's composite nature is revealed also by an inspection of the moral and practical life. Reason does not hate the world, the flesh, and the morality to which in the human animal it must always return from its loftiest flights to nest. But neither is it a cuckoo laying its eggs where they do not belong. The nest is of its own construction. The righteous life is not irrational. It is rational so far as it goes. Practical wisdom is true knowledge of what is best for *man*, and reason, even when its vision is narrowed and confined to meditation upon our human estate, is still reason. The moral law, the golden mean, is an apprehension, in the midst of all the differences and degrees of human activity, of something that is universally valid, for us at least. There is, then, in human activity according to moral virtue "some likeness" of contemplation—which, Aristotle would maintain, is lacking in the perhaps more highly socialized and well-ordered practical activities of the industrious ant or the busy bee. This "share in contemplation" organizes our practical pursuits into a career, gives us the idea of our life as a whole, and enables us to find even our practical and "moral" good in something wider and higher than the business or the enjoyment of the moment. By virtue of our rationality each act of ours is performed and each moment lived, not in a wrack and turmoil of unremembered, unforeseen, and disconnected experiences, but beneath an overreaching sky that stretches unbroken from sunrise to sunset, and that is equally suffused from horizon to horizon with the glow of a single, unified self-fulfilment. In other words, we are privileged to substitute abiding happiness for fleeting pleasure, a privilege denied to the other animals, which "in no wise share in contemplation." [202] Consequently, Aristotle tells us, although the man who exercises and

[200] X, 3–7; *cf.* Stewart, *op. cit.*, II, p. 454.
[201] X, 8, 1178*a*, 24–1178*b*, 3.
[202] X, 8, 1178*b*, 20–32; *cf.* Stewart, *op. cit.*, II, p. 451.

cultivates his reason in accordance with its intellectual virtue and in the service of pure contemplation "seems to be both in the best frame of mind and dearest to the gods," [203] the man who exercises it only with regard to the activities of his purely human estate and "in accordance with the other (the moral) kind of virtue is happy but in a secondary degree." [204]

That the happiness accruing from the exercise of practical wisdom alone must be inferior to that which rewards contemplation follows from the essence of reason. Thought is essentially a pursuit of the universal and the eternal, and it can be fully satisfied only in grasping them. But, when it is exercised with reference to a purely human concern like morality, it is dealing with a contingent and variable sphere in which no absolute truth can be discovered, no precise rules can be formulated, and hence no thoroughgoing rational satisfaction can be found. The inexact, relative, and provisional "rightness in morals" accordant with practical wisdom can, then, never bring the mind the same high and final happiness as that conferred, say, by rightness in mathematics, which is rigid, universal, and unalterable.

To Aristotle's preference for the contemplative life, and to his insistence that the man whose mind stops short with the practical and moral concerns of life also falls short of complete happiness, we need make no objection. True, his attitude may reflect mainly his own personal prejudice in favor of science and betray the dryness of an intellect deficient in aesthetic, religious, and moral enthusiasms and satisfactions. Doubtless, also, it was influenced by the fact that the specifications laid down by physics for an unmoved source of motion disqualified "practical activity," and could be met only by the self-sufficient and self-engrossed activity of pure contemplation. Still, we may see in it also a wider lesson, which, even if it is not contained in the letter, is in harmony with the spirit of the text.

All purely "moral" activity, we might say, is really local, not cosmopolitan in its scope. It smacks of the home-town, not of the universe at large, and is the sign of a limited, finite,

[203] X, 8, 1179*a*, 22–24. [204] *Ibid.*, 1178*a*, 9 ff.

and particular kind of being constituted and circumstanced in a special way. It neither acquaints us with what is universally true, nor attaches us to a good or a happiness that we can share with beings differently organized, situated, and aimed from ourselves. The good and the happiness it supports are entirely relative in character. In our case, for example, they are specifically human in type and might not suit at all the wants of the inhabitants of Mars. Nay more, moral and practical activity, if unsupplemented by freedom and breadth of intellectual vision, may be an actual detriment to rationality and tend to destroy the very life it ought to save. Uncorrected, it is sure to assert the human good, or even some local and temporary standard of right action, as valid for all space and time, and thus to make us awkward, offended, and even unhappy in the presence of ideals and conduct other than those fostered by our native soil. It is, to be sure, grotesque and fatal for us to try to *act* as other than human beings. But it is no less irrational for us to try to *think* as human beings merely, and to allow our intelligence and vision to be enclosed within the moral walls that necessarily limit our behavior. To do so is to make a prison of what should be a house.

It is only on the level of contemplative reason and the vision of truth that we can meet and converse amicably with organisms of a different constitution and hence of a different morality from our own. For it is the essence and the greatness of contemplative activity that it can refrain from regarding any given system of practical and moral life as absolute, and can thus check the lower impulse of every such system to impose itself as final upon the entire universe and even upon God himself. At the same time, by detaching each organism from itself, raising it above its particular estate, and providing a ground for a universal understanding, contemplative reason is able to open to all concerned a joint account of identical perfection and happiness, which may properly be accounted "higher" than the private happiness accessible only to an organism of a particular type. As rational beings we can consort with any intelligence, no matter what kind of body it may inhabit, and however alien to our own the conditions of its mortal, practical, and moral

existence may be. And a divine intelligence, lacking a specific base and lodged in no particular organism, must be without practical activities, and hence without a particular morality of its own, human or other. Here we have another ground for believing that any God who is not merely a local and a tribal deity must be essentially an activity of pure reason in and for itself.[205]

This does not mean, however, that contemplative reason is unmoral. On the contrary, the most detached spectator of all time and existence would see and affirm the necessity of every organism's living within the limits and according to the ideals set for it by its specific nature, and would reprove any creature that was false to its particular kind of good. To the human being who exercised it reason might be expected to recommend human excellence, to the Martian, Martian virtue, in the same breath that it forbade them both to measure the one by the other. And this is precisely what reason does in our case. We are untrue to our rational nature, if in our thinking we take no account of other possible organisms with other possible moral goods, and seek to impose our human standards and system of conduct upon the universe at large. But we are equally untrue if we fail in our behavior to recognize and observe the validity of that standard and that system for ourselves. By surveying and understanding the human situation we reach a rough idea of the best and happiest course, on the whole, for the human animal to take. And by acting in accordance with that idea we create the particular conditions which best shelter and promote the wider life of scientific inquiry and philosophic contemplation of universal truth.

To act, however, without knowledge of the true bases and limitations of our moral ideals is to lack enlightenment and to miss the insight, sympathy, and tolerance, and the higher reaches of happiness attained through them, of which a rational animal is capable. It is the contemplative activity of reason, not the practical, that constitutes the broad-mindedness and the clear-headedness of man. These qualities display themselves on two planes. The perception that the human good as

[205] *Cf.* X, 8, 1178*b*, 7–23; also Stewart, *op. cit.*, II, p. 454.

a whole is relative, not absolute, in the universe is reflected within the sphere of human morality by a perception of the relativity of the moral standards of different times, places, and even individuals. In the spectacle of reason realizing that no ethics can be universal in its scope, or exact and rigid even within its field, we see the human spirit at its happiest and its best, resisting what is perhaps its most persistent and irresistible temptation, achieving its most difficult conquest over a lower self, and exercising victoriously its highest function.

We have now completed our review of ethics in the sense in which Aristotle uses the term—the study of practical wisdom "in that form of it which is concerned with a man himself —with the individual." [206] But, we may remember, Aristotle is also quick to realize that the individual cannot be dissociated from the community.[207] Man is a "political animal," as political a one, we might say, as he is a two-legged creature. It is natural and instinctive for him to associate with others.[208] Hence no system of ethics is complete without a discussion of human social and political organization. Indeed, at the beginning of the *Nicomachean Ethics* Aristotle applies the term politics to what we should call moral science.[209]

Before, however, we turn to Aristotle's discussion of the state, we shall do well to follow him in his study of the impulse to associate upon which the social structure rests. To this he devotes Books VIII and IX of the *Nicomachean Ethics*, which deal with the subject of *friendship*, or, as we might say to-day, the social and sociable side of the individual man. After pointing out that friendly association is for many reasons necessary to the welfare of the individual, and that it is the basis of many virtues,[210] Aristotle proceeds to divide into three classes the bonds that hold people together. In the first place, people may be drawn to one another because they can be of reciprocal use. Again they may hang together because they give one another pleasure. Both these sorts of association are in a way impersonal, and as we should say to-day, "selfish," for they

[206] VI, 8, 1141*b*, 29–31.
[207] *Ibid.*, 31–1142*a*, 11.
[208] *Pol.*, I, 2, 1253*a*, 1.
[209] *Eth. Nic.*, I, 2, 1094*a*, 26 ff.
[210] VIII, 1–2, 1155*a*, 1–1156*a*, 5.

do not rest upon a feeling for the individual himself but rather upon the use or pleasure that can be got out of him. Nor are they apt to be permanent, since when the motive of friendship of this sort "is done away the friendship is dissolved, inasmuch as it existed only for the ends in question." [211] Moreover, they can exist between vicious as well as virtuous men [212]—in which case, we might add, they are frequently anti-social in character.

The third and best type of friendship—indeed, the only type that is durable and slander-proof, and that regards the individual not as a means but as an end—is the so-called "friendship of the good," which unites "men who are good and alike in virtue." Either party to such a friendship loves the other for himself and for his intrinsic qualities, rather than for the use to which he can be put or the pleasure that can be had from him. However, since nothing can be more useful or pleasant to the good man than goodness in his friend, such friendship includes the two other kinds.[213]

But the springs of even this love of the individual for himself are still, according to our modern standards, self-love and self-interest. In loving a friend for his own sake, Aristotle tells us "men love what is good for themselves; for the good man in becoming a friend becomes a good to his friend. Each then . . . loves what is good for himself." [214] In Book IX Aristotle develops this doctrine of altruism as a form of self-love. "Friendly relations with one's neighbours," he says, "and the marks by which friendship are defined, seem to have proceeded from a man's relations to himself." They are an extension of the harmonious existence, and the pleasant and profitable talking to oneself, that can be carried on in isolation. A friend is an *alter ego*, but he is still essentially a part of one's own ego, and one's love of him is essentially love of oneself.[215] Only, "in friendship of the good there is an equal return in good will and pleasantness." Each party gives as much as he receives, which is frequently not the case in associations for mere pleasure or profit.[216] So far, then,

211 VIII, 3, 1156*a*, 6–1156*b*, 6.
212 VIII, 4, 1157*a*, 16–20.
213 VIII, 3–4, 1156*a*, 7–1157*b*, 5
214 VIII, 5, 1157*b*, 25–1158*a*, 1.
215 IX, 4, 1166*a*, 1–1166*b*, 1.
216 VIII, 5, 1157*b*, 25–1158*a*, 1.

even the best type of friendship would seem to be marked by equality and justice, but not by what we should call unselfishness.

But this, as Aristotle goes on to show, is by no means all there is to the matter. If we examine friendship of the higher type more closely, and particularly in its deepest and most instinctive forms, as in the love of a mother for her child, we shall find that "it seems to lie in loving rather than in being loved," in giving without asking anything in return. Being loved, indeed, is merely incidental to the loving that "seems to be the characteristic virtue of friends." [217] Moreover, in affection of this sort there is a sense of personal identity with the person loved, or rather there is a feeling of being included in a wider self of which one's friend is also and equally a part. The love of brothers, for example, expresses the kinship that "makes them identical with each other . . . they are therefore in a sense the same thing, though in separate individuals." So, too, parents love their children as part of themselves; not, however, "selfishly" as a mere adjunct or possession of their own "egos," but as "a sort of other selves," leading "a separate existence." [218]

In relations like these, which are found not only in kinsfolk but in comrades, and, we might say, in *personal* ties in general, the distinction between "egoism" and "altruism" becomes trivial and a matter of words only. Loving our friends is self-love of the most pronounced and deepest kind. It is the "ego" that does the loving, and it can only love what is an integral and valuable part of its own life. But, since we are instinctively and naturally gregarious and social animals, the self that we instinctively and naturally love most deeply, and in which our separate individualities are expressed most completely, is social in character. It includes other people regarded not as slaves but as equals, and its most entirely "selfish" happiness is found, not by calculation but by instinct, in altruistic activity. For the individual, then, to be selfish at the expense of others is really for him to be selfish, paradox though it seems, at the expense of himself.

[217] VIII, 8, 1159*a*, 27–1159*b*, 1. [218] VIII, 12, 1161*b*, 27–33.

Thanks to our recent studies of crowd psychology, and to our growing belief that the herd instinct is more primitive in point both of racial evolution and of individual psychological structure than the sense of separate personality, we are beginning to see the futility of the opposition of egoism to altruism, which for so long a time was a favorite bone of contention among modern moralists. But Aristotle had already recognized it in a fine passage in Book IX in which he discusses the question, in his time, also, it would seem, much debated, "whether a man should love himself most, or some one else."[219] The answer depends, we are told, upon what we mean by "self." If the self we love is identified with "wealth, honor, and bodily pleasures," and if we love these things more than we do our friends and seek them at other people's expense, as the wicked do, then self-love is justly reproached. But even here the opposition is not really between ourselves and others, since love of this sort is not really *self*-love in its deepest and truest sense. Man's true self is his reason which is universal in its scope and its interests. But the love we have been describing is irrational in its origin, springing, as it does, not from reason but from appetite and emotion, and it is equally irrational in the objects on which it sets its heart. That "those who give themselves the preference in regard to objects of this sort" are what most people mean by "lovers of self" is not surprising, since most men are infected with this kind of selfishness.

The self, however, that the good man, who obeys his reason, loves, includes other people. It is a community of friends in which his private, separate self attached to the interests of his particular body plays a subordinate part. The good man sacrifices wealth, honor, office, nay even the opportunity to do a noble deed and acquire merit for himself, if by the sacrifice he may benefit his friends and his country. If necessary he will even die for them out of loyalty to himself, feeling, as Aristotle remarks, that it is the quality not the quantity of one's living that counts, and preferring "a twelve month of noble life to many years of humdrum existence, and one great and noble action to many trivial ones."

[219] IX, 8, 1168*a*, 28–1169*b*, 2.

Such love, of course, is self-love. The actions in which it is expressed are felt by the individual to be to his own individual advantage. The wider self which includes others is still *his* self. It is *he* whom "many years of humdrum existence" would bore. In a sense, then, "the good man is seen to assign to himself the greater share in what is noble," since it is more blessed to give than to receive. But such selfishness is praiseworthy. From it all invidious distinctions between egoism and altruism have disappeared, and there is no longer any sense in debating "whether a man should love himself most or some one else."

The rest of Aristotle's discussion we pass over very briefly. It is devoted mainly to a further development of the necessity and naturalness of friendship, to pointing out its similarities and its differences to various cognate qualities, and to considering various *minutiae* of the subject. Enough has been said to show that the individual man is naturally a political animal, and that his friendly relations with his neighbors and the marks by which friendships are defined (including, we might say, all his social and political relations) seem to be, not artificial, but to have proceeded from his relations with himself and to express his rational nature.[220] With so much as preamble, let us turn to the *Politics*.

[220] *Cf.* IX, 4, 1166*a*, 1–2.

## CHAPTER X

## ARISTOTLE'S POLITICAL THEORY

The *Politics* is not a single organic whole. It is rather a compilation of five different treatises, dealing, in the order of the books, with (Book I), the household or family; (II), ideal states and the best existent constitutions; (III), citizenship and the classification of constitutions; (IV–VI), inferior constitutions; and (VII, VIII), the ideal state.[1] The order in which the books were written and are best read is a disputed point. Apparently, Aristotle's views on politics developed along much the same lines as his metaphysics and ethics. The fragments of the dialogues and other early lost treatises show that he started as a good Platonist, believing politics like ethics to be an exact science, and the ideal state capable of a rigid mathematical formulation.[2] In Books II, III, VII, and VIII we find him, to be sure, criticizing the details of the Platonic and other Utopias, but still engaged in a thoroughly Platonic manner in trying to construct an ideal state of his own. Much more realistic, disillusioned, and therefore seemingly later, are Books IV, V, and VI in which constitutions like oligarchy and democracy, roundly damned in the subsequent books but presumably earlier writings, are at last studied on their merits and even cured of their defects and turned into workable systems. And Book I, it has been suggested, came latest of all as an attempt to give the state, and incidentally the family, now conceived as built up from below rather than let down from above, a thoroughly naturalistic basis in human nature as it is.[3] But the *Politics* never escapes the influence of Plato's later political theory, and its debt to the *Statesman* and the *Laws* is only too obvious.[4] To the last decade of Aristotle's life belongs

1 *Cf.* Ross, *op. cit.*, p. 236.
2 Jaeger, *op. cit.*, pp. 88–89, 273–276.
3 *Cf.* Jaeger, *op. cit.*, pp. 278–286.
4 On this point *cf.* Barker, *op. cit.*, p. 291, note 1, pp. 380 ff.

also the detailed, scientific study of the one hundred and fifty-eight state constitutions.[5] As we have followed, albeit with somewhat wavering footsteps, the line of a similar evolution in Aristotle's metaphysical and ethical theory, we may as well tread the same path in considering his discussion of politics; remembering, however, that in this case all roads lead equally to Rome and that many critics still prefer to read the books of the *Politics* in the order in which they are numbered.[6]

Turning back, then, to the lost dialogues and other early works, we find Aristotle explicitly announcing in much the same sort of way as Plato had announced in the *Philebus*, that the Good is the most exact of all measures.[7] In the *Protrepticus* this doctrine is frankly imposed upon would-be framers of constitutions. Just as it is a poor carpenter, we are told, who gets his ideas, not from a standard plan, but from existent buildings, so it is a poor lawgiver who takes as a model for his work other humanly devised constitutions like those of Sparta or Crete. For an imitation of what is not ideal cannot itself be ideal, nor can a copy of anything that is not divine and enduring be itself permanent and deathless.[8]

Passing now to the *Politics* we find Aristotle still convinced that the absolutely best type of state can be thought out *in vacuo* and that a Utopia is feasible. But whether he ever accepted the Platonic version of an ideal commonwealth is doubtful. Certainly in Book II of the *Politics* we find him criticizing it at length. In the first place, he argues, the rigid unity of the state, which Plato sets up as an ideal, and as means to which he advocates his reforms, is of dubious value. The greatest degree of variety, division of labor, and compensatory activities compatible with social stability is to be preferred. Again, it is better that all the citizens should take their turn at governing than that the ruling class should form a closed corporation. To advocate, then, such reforms as the abolition of private property and the communizing of women and children in the interests of unity is to advocate them on false grounds. Nay more, even if unity were desirable, it is doubtful whether

[5] Barker, *op. cit.*, p. 272.
[6] *Cf.* Ross, *op. cit.*, p. 236.
[7] Jaeger, *op. cit.*, pp. 88–89, 273.
[8] *Ibid.*, p. 274.

the end would be best subserved by such means. Common ownership of property and of wives and children might well be a fruitful cause of discord between the individual partners to it.[9] Moreover, the crimes resulting from this discord would, in the Platonic scheme with not only its ignoring but its ignorance of all family relations, raise unwittingly the hand of brother against brother and of child against parent; not to speak of the unavoidable incest that would result.[10]

The truth is that the individual himself cannot be communized and rendered oblivious of the distinction between "mine" and "ours." This being the case, communism such as Plato advocates would tend to destroy all sense of individual responsibility. "What is common to the greatest number has the least care bestowed upon it . . . and everybody is more inclined to neglect a duty which he expects another to fulfill." The individual naturally "thinks chiefly of his own interest; hardly at all of the common interest," and then "only when he himself is concerned as an individual."[11]

In other words, without private interests there can be no public interest, since interest of any sort can only be felt by the individual, and must be felt by him as the interest of his particular self. Because the separateness of a man's personality cannot be abolished and his individuality cannot be communized, public spirit and public service must always consist in placing at the disposal of the state something that each man considers essentially his own. Deprive him of what he instinctively considers *his*, and you create within him an artificial opposition of public to private interest, and turn what should be a free gift into a forced sacrifice, thus embittering his natural propensity to share with and serve his fellow beings, and poisoning at its roots the impulse from which society springs. The wider the scope of his individuality and the more he can call his own, the richer in virtue his contribution to the community, and the richer the community for it.

Seeing, then, that there can be no state if there are no individuals, and that the existence of individuals at their best

[9] II, 1, 1260*b*, 26–3, 1261*b*, 32.
[10] II, 4, 1262*a*, 25–39.
[11] II, 3, 1261*b*, 16–35.

involves individual interests, activities, and possessions, the sense of individuality and of particular, private ownership must be retained and encouraged in an ideal commonwealth. To this end, Aristotle feels, private property and the family are indispensable means. Without them the individual would be starved of his instinctive sentiments of regard, affection, and friendship for others upon which any society of individuals must rest. Communize women and children, and "love will be watery," like a "sweet wine mingled with a great deal of water." [12] Remove private property, and you destroy the spirit and the pleasure of co-operation, since a man no longer has anything of his own to put at another's disposal. "Kindness or service to friends or guests or companions . . . can only be rendered when a man has private property." The great virtues of liberality and generosity are bound up with it. A man cannot share with others if he has nothing of his own to share. "It is clearly better," Aristotle concludes, "that property should be private, but the use of it common; and the special business of the legislator is to create in men this benevolent disposition," rather, we might add, than to uproot it, and replace it with the meddlesomeness and recrimination that come from all men attending to a business that is everybody's and nobody's. The institution of private property, to be sure, is capable of great improvement. But, if improved as it might be "by good customs and laws, it would be far better and would have the advantage of both systems." [13]

Finally, Aristotle thinks, Plato commits the fallacy into which so many reformers fall, of supposing that existing conditions can be altered along the desired lines and at the same time remain unchanged in all other respects. He fails to see that, supposing his reforms could be inaugurated, he would, in saving mankind from certain evils, also be depriving them of many advantages they now enjoy. Existing conditions and the experience of ages have a certain authority that cannot be disregarded. "In the multitude of years" the changes proposed by Plato "if they were good would certainly have not been

[12] II, 4, 1262*a*, 41–1262*b*, 22.

[13] II, 5, 1262*b*, 22–1263*b*, 14.

unknown; for almost everything has been found out, although sometimes they are not put together."[14]

After pointing out in some detail that "the same or nearly the same objections apply to Plato's later work, the *Laws*,"[15] Aristotle reviews and criticizes two other Utopian schemes—one set forth by Phaleas of Chalcedon, who wished not so much to communize as to equalize property, the other by the philosopher-architect Hippodamus, the first to lay out a city in the rectangular, American manner, who tended to divide everything, citizens, laws, and land, into three classes, and worked out numerous other impracticable proposals.[16] The rest of the book is devoted to a discussion of three actual constitutions, the Spartan, Cretan, and Carthaginian, in which the communistic idea had been actually tried out to a certain extent. And here Aristotle collects evidence to show that the collective scheme has not worked well in practice.[17]

Having thus cleared the ground, Aristotle is now ready to begin the construction of his own ideal state. But here, too, certain preliminaries are necessary. To these Book III is devoted. We must first ask, what is a state? and what do we mean by a "citizen"? The answer is that, whatever the conditions laid down for citizenship may be, its essence lies in sharing in the deliberative or judicial administration of the state, and that "speaking generally a state is a body of citizens sufficing for the purposes of life." Aristotle, however, does not use the term "state," as we do, in the sense of "fatherland" or "country," but rather as identical with what we should call the "government." For, he says, if a particular constitution is overthrown and replaced by a new form, then the "state" in question lapses, and another takes its place.[18] Furthermore, the state is not co-extensive with the whole life of the citizens who compose it and does not absorb all their vices and virtues. A good citizen, for example, need not be a good man in all respects. And, though a good man must necessarily be a good

[14] II, 5, 1263*b*, 28–1264*b*, 26.
[15] II, 6, 1264*b*, 27–1266*a*, 30.
[16] II, 7–8.
[17] II, 9–12.
[18] III, 3, 1276*a*, 25–1276*b*, 16. *Cf.* 9, 1280*b*, 13–30.

citizen among other things, he also has values that citizenship does not express. Only in the good *ruler*, whose whole business it is to govern, will the virtue of the good man and the good citizen coincide.[19]

The origin, purpose, and justification of the state lie in the fact that it is an indispensable condition of human well-being and happiness. Man is a political animal, and therefore "men, even when they do not require one another's help, desire to live together." But naturally they are also more closely knit in proportion as by their common interests "they severally attain to any measure of well-being." If this be the case, we get an immediate criterion for distinguishing good from bad constitutions. The common interest is our standard, and "governments which have a regard to the common interest are constituted in accordance with strict principles of justice, and are therefore true forms, but those which regard only the interest of the rulers (whatever the ruling class may be) are all defective and perverted forms, for they are despotic, whereas a state is a community of freemen."[20] From the "freemen" Aristotle naturally excludes the slave-class, and would like to exclude the artisan, the mechanic, and the husbandman.[21] This restriction of citizenship may at first sight seem narrow-minded and not wholly "in accordance with strict principles of justice." However, we must remember that the Greeks had little conception of representative government, and that the average "citizen" did not confine his political activities to voting, as he does with us, but was directly engaged in legislating and must be ready and qualified to take his turn as a judge. The legislative, judicial, and administrative duties and responsibilities that thus devolved upon the individual "freeman" were, then, so exacting that the status of citizenship could not well be accorded either to the laboring class at home or to the colonial or the inhabitant of a subject-city abroad.[22]

The test of devotion to the common interest may be met equally well by a single ruler (kingship) or a small ruling class (aristocracy) or the whole body of free citizens (constitution-

[19] III, 1–4.
[20] III, 6.
[21] III, 5.
[22] *Cf.* Ross, *op. cit.*, pp. 247–248.

alism, as Aristotle calls it). But each form has its special perversion in which class interest is placed above "the common good of all." Thus the monarch becomes a selfish tyrant, aristocracy may degenerate into oligarchy, or a government in the interest of the wealthy alone, and instead of constitutional rule, we may get democracy, which subordinates the welfare of the whole state to the interests of the needy.[23]

So far then, we have three eligible candidates for the ideal commonwealth, but no basis for further elimination. This we may perhaps find by asking and answering the question, by what right and on what grounds is one man or body of men justified in ruling another? Is it by sheer weight of numbers—that is, by being in the majority? Or is minority rule justified by superior wealth or superior goodness? Or is the strength of the tyrant sufficient ground? Or the excellence of some outstanding man?[24] These questions we must seek to answer, remembering always that the real reason for the existence of the state and the real tie that unites individuals in a given commonwealth, are not security or prosperity, nor yet the satisfaction of the gregarious instinct. The purpose of the state is found rather in the good life—the perfect, self-sufficing, happy, and honorable life of all the citizens composing the community.[25]

Now, when we are dealing either with the rule of a minority over a majority, or of a majority over a minority, these questions are almost impossible to answer. Wealth, education, birth, virtue, military ability, numerical superiority, have all their just but conflicting claims—claims that are analyzed by Aristotle with a minuteness that we have not the space to describe.[26] Two conclusions only emerge with any certainty; first, that "none of the principles on which men claim to rule and to hold all other men in subjection to them are strictly right,"[27] and again that "laws when good should be supreme; and that the magistrate or magistrates should regulate those matters only on which the laws are unable to speak with precision, owing to the difficulty of any general principle embrac-

[23] III, 7.
[24] III, 10, 1281*a*, 12 ff.
[25] III, 9.
[26] III, 11–13.
[27] III, 13, 1283*b*, 28–30.

ing all particulars." Yet, here again, the difficulty persists of saying what laws are good. This, however, is clear—"that laws must be adapted to constitutions," in which case "true forms of government will of necessity have just laws, and perverted forms of government will have unjust laws."[28] But this does not get us much further in our search.

Nevertheless, the light is beginning to dawn. We might reasonably feel, as Aristotle appears to do, that aristocracy and the constitutional rule of the many are eliminated, for the time being at least, by the difficulties of drawing up any just and balanced formula reconciling the conflicting qualifications just noted for citizenship and the exercise of rule. True, there is much to be said for government by the many. The crowd is less likely than the individual to be carried away by passion; the voice of the people may be a nearer approach to the voice of God than the voice of a select class; exclusion of the many breeds a discontented proletariat; and after all, since it is the many who are governed, they ought to have a say in choosing their rulers—a choice, moreover, that they are capable of making with sufficient wisdom.[29] And yet?

Suppose, Aristotle continues, a single man or family should appear "whose virtue is so pre-eminent that the virtues or the political capacity of all the rest admit of no comparison." Obviously such a person or little group would transcend the state, and it would be unjust to subject them to the laws made by their inferiors, for "such an one may truly be deemed a god among men." In dealing with a man of this sort two alternatives, and two only, would be possible. The one would be to get rid of him by assassination or ostracism—which is what most states do when confronted with outstanding ability; the other and the wiser course, which would prevail in a perfect state, would be that he should be made the lawgiver, and that "all should joyfully obey such a ruler according to what seems the order of nature."[30]

Kingship, then, would seem to have distinct possibilities as the ideal form of government. At any rate, it is worth examin-

[28] III, 11, 1282*b*, 1–14.
[29] III, 11. *Cf.* Ross, *op. cit.*, pp. 254–255.
[30] III, 13, 1284*a*, 4–1284*b*, 34.

ing thoroughly. This Aristotle does in the rest of Book III. He begins by distinguishing five types of monarchy. First there is the Spartan, which is elective and military, a sort of "generalship for life." Then there is the type in vogue among the barbarians, which is a legally established, hereditary despotism. To these we may add two others of lesser importance and interesting only historically, the elective despotisms that existed in ancient Greece, and the chieftainships of heroic times whose office was hereditary and whose rule was voluntarily submitted to by their subjects. Finally there is a form in which the king occupies a position analogous to that of the ruler of a household.

The last three forms, and for that matter the Spartan, which is only a sort of perpetual generalship compatible with any type of government, may be left out of the discussion. So, too, may limited monarchy, in which the kingship may rest upon a non-monarchical base such as aristocracy or even democracy. We are concerned only with absolute monarchy—with "the king who acts solely according to his own will." [31]

At close grips the advantages of this sort of monarchy are not so striking. The hereditary principle may be mischievous, if the son is not so able as his father; yet the impulse to found a dynasty is irresistible. Again, too large a body-guard is apt to turn the king into a tyrant.[32] Furthermore, no one man can superintend the business of the whole realm. The king must have friends, advisers, and subordinates to help him carry on. They must be his equals if the benefits of monarchy are to be retained. But if they are his equals the monarchical principle in its purity has really been abandoned.[33] Finally, there is the question of the relation of the monarch to the law. Law, indeed, must be supreme. It is passionless and unaffected by desire, its rule is that of God and Reason. But "laws will have no authority when they miss the mark," and to hit the mark "the best man . . . must legislate." Moreover, hard and fast laws, written down in black and white, cannot do justice to the relative and variously shaded merits of individual

[31] III, 15, 1285*b*, 34–16, 1287*a*, 3.
[32] III, 15, 1286*b*, 20–41.
[33] III, 16, 1287*b*, 9–36.

cases. Here the monarch steps in. He must, to be sure, abide by the laws he has framed and let them govern, but he must also deal individually and as an individual with the particular situations to which the law cannot be strictly applied. Still, will any one man be able to do complete justice and determine what should be done, if the law is unable to do so? Perhaps the best thing to do is to appeal from written law to custom and tradition, for "a man may be a safer ruler than the written law, but not safer than the customary law."[34]

But whether an absolute monarch be best fitted to fulfil the function of framing, interpreting, and enforcing the law remains an open question with Aristotle. It depends, he tells us, upon the nature and temperament of a people. A people that can produce "a race superior in the virtue needed for political rule are fitted for kingly government." And, generally speaking, when a family or individual of this type appears "it is just that they should be the royal family and supreme over all, or that this one citizen should be king of the whole nation." On the other hand, a people that values the status of freeman, and at the same time produces a class capable of political command, are adapted for an aristocracy. And constitutionalism best suits a warlike state where all are disciplined both to obey and to rule and are accustomed to rotation of office among the well-to-do.[35] The upshot of it all is that we come out by the same door wherein we went, still with three true forms of government on our hands, and unable to say that any one is necessarily best in all circumstances.[36] The only thing we can say with any certainty is that ideal government, by whomever exercised, must be according to law as far as possible, and according to law so sound that it is safe from being tinkered with and continually changed at the behest of class interests or the personal caprice of the legislator.[37]

But, now, whichever of the three best forms of government an ideal commonwealth may choose, the social and economic life of such a state will have distinctive features. And perhaps a study of them will throw some light upon the ideal form of

[34] III, 16, 1287*a*, 18–1287*b*, 8.
[35] III, 17, 1288*a*, 7–18, 1288*a*, 38.
[36] *Cf.* Ross, *op. cit.*, p. 256.
[37] III, 16, 1287*a*, 18 ff.

administration. To a rather inconclusive, and it may be uncompleted discussion of these features, Aristotle devotes Books VII and VIII. We are reminded at the outset that the purpose and justification of the state is the promotion of the most eligible life, and that this life is "the life of virtue, when virtue has external goods enough for the performance of good actions." The acquisition of "wealth, property, power, reputation and the like," possible under social organization, is not, he once more insists, an end in itself. Goods like these ought to be chosen only "for the sake of the soul, and not the soul for the sake of them." The reason for political organization is happiness, and that "form of government is best in which every man, whoever he is, can act best and live happily." [38]

But it may be objected, government in any form, however free and constitutional, instead of securing happiness to the individual "is a great impediment to a man's individual well-being." To put it on the highest possible ground, the duties and restraints of community life may interrupt and hamper the life of contemplation. To this Aristotle replies that though the criticism may hold good of despotism, it is not true of a government of free men. Freedom from government is indeed better than being ruled by a tyrant. Despotism, governing, as it does, against the will of the governed, is an unjust and irrational proceeding on the even part of the governing class —except where the subject race or class is obviously unfit to rule itself—and therefore cannot make the despot himself truly happy. But constitutional government instituted by freemen is not despotism, nor is its rule tyrannical. It expresses rather than suppresses the will of the individual, and engages his practical and moral activities, the exercise of which brings him happiness of a noble sort. Social and political life, then, is an aid, not an impediment, to the cultivation of the higher interests of the individual. Isolation and retirement from society are neither necessary nor desirable for the devotee of the contemplative life.

At the same time, Aristotle is careful to point out once more that the individual has values and activities which are private,

[38] VII, 1–2, 124*a*, 25.

cannot be communized, and can be exercised in isolation. Cultivation of them is not inactivity, but activity of the most intense kind. It is not true, he tells us, "that a life of action must necessarily have relation to others, as some people think, nor are those ideas only to be regarded as practical which are pursued for the sake of practical results." On the contrary our "thoughts and contemplations which are independent and complete in themselves" are practical in the sense of being self-sufficient and self-justifying. So too, an isolated state, cut off from international relations, is not necessarily inactive. It has its own individual life and value, which its own inner organization is sufficient to support.[39]

With so much of philosophic preamble Aristotle turns to a description of the life of the perfect state. In the first place, population must not be too large. It is quality, not quantity, that counts. "A great city is not to be confounded with a populous one"—a motto that many modern communities might take to heart. The size of a state has a natural limit determined by the exigencies of good government and the happy life. A large city is rarely, if ever, well governed, and lacking order it lacks beauty. Enough population for the purposes of a good life is sufficient. So, too, with its territory. In size and extent this "should be such as to enable the inhabitants to live at once temperately and liberally in the enjoyment of leisure." The land must produce everything that the citizens need, and must be easy to defend against an enemy, and at the same time be "easy of egress to the inhabitants." The city proper should be "well situated in regard both to sea and land, . . . a convenient centre for the protection of the whole country," and the natural market for the country's produce. Access to the sea has, to be sure, certain disadvantages, but they are more than offset by the benefits of easy export and import and increased trade. In these circumstances, the city will need a navy "commensurate with the scale of her enterprises," officered by citizens but manned from the disenfranchised classes.[40]

The site of the city will be further determined by considera-

[39] VII, 2, 1324*a*, 25–3, 1325*b*, 33. [40] VII, 4–6.

tion of health—such as airiness and a pure and abundant water supply. The streets should be arranged according to the rectangular "modern fashion which Hippodamus introduced," and the whole should be enclosed within walls "divided by guard houses and towers built at suitable intervals" and constructed with an idea to ornament and beauty as well as to protection.[41] There should be a temple occupying a lofty situation, an assembly place for the freemen, and a produce exchange for the trades. In personal character the inhabitants of this well-ordered spot should be like the Hellenic race, both high-spirited and passionate on the one hand, and intelligent on the other.[42]

The needs and functions of the ideal state will pertain to food, the arts, armies, revenue, religion, and finally the "power of deciding what is for the public interest and what is just in men's dealings with one another." To this end every man should not be "at once husbandman, artisan, councillor, judge" and the like, but there should be division of labor and of classes. Mechanics and tradesmen should be excluded from citizenship, since their "life is ignoble and inimical to virtue." So too must "husbandmen, since leisure is necessary both for development of virtue and the performance of political virtue."

The freemen, who have a share in the government of the state and bear arms in its defense, ought to own the land and own it privately, but "by friendly consent there should be a common use of it." Each citizen should have real estate, both out of town near the frontiers and in the city itself—so that his interests may be neither distinctively urban nor rural, and may be equally exposed to the hazards of war. In this way sectionalism in time of peace and half-heartedness in moments of emergency will be avoided.[43] The citizens should take their meals in groups at tables which may be conveniently located in the different houses. These tables will be supported from land owned by the state. Aristotle promises but neglects to give us his reasons for advocating these common meals. Perhaps he saw in them a device for offsetting the isolating in-

[41] VII, 11–12.
[42] VII, 7.
[43] VII, 10, 1329*b*, 36–1330*a*, 24.

fluence of private establishments and for fostering community spirit.[44]

Among the citizens there should be no division of military and political duties save that imposed by age. The warriors will be embryo councillors, the councillors older or retired warriors. The priests should be chosen from among the more venerable members of the soldier-councillor group. The husbandmen and traders will be slaves or barbarian foreigners. It is better, however, that they should be slaves chosen from various non-warlike races. Some of them will belong to individuals, others will be owned by the state.[45] Slaves, Aristotle tells us in another place, should be kindly but strictly treated, and should be encouraged to work by holding out freedom as a prize.

Since the rule of an absolutely wise and benevolent monarch is something that cannot be attained even in an ideal state composed of human beings, it is plainly best that there should be no hard and fast distinction within the citizen class between the rulers and the ruled. "All the citizens alike should take their turn of governing and being governed," with the proviso that the old are more fitted to rule, the young to obey. To produce a class capable of both, a carefully planned system of education is necessary. This system must take into account the kind of animal man is, and must seek to train and discipline his natural gifts into good habits by developing within him "the rational principle and mind towards which nature strives." The statesman, then, "should consider the parts of the soul and their functions, and above all the better and the end; he should also remember the diversities of human lives and actions."[46]

His first care will naturally be that of breeding good material. With this in view he must establish the most advantageous age for marriage—eighteen in the female, thirty-seven in the male, and should see that prospective parents are of sound and suitable constitution. Incidentally Aristotle does not consider the athlete a good eugenic risk. Deformed chil-

[44] VII, 10, 1330*a*, 3 ff.
[45] VII, 9, 1329*a*, 2–33; 10, 1330*a*, 24 ff. *Cf.* I, 5; VII, 10, 1330*a*, 25–33.
[46] VII, 13, 1332*a*, 39–14, 1333*a*, 40.

dren should be put out of the way. Excess of children should be prevented by birth-control, and here Aristotle favors abortion at an early stage of pregnancy, "before life and sensation have begun" in the embryo. Men should not breed after fifty-five, though after that sexual relations are still permissible "for the sake of health or for some similar reason." Adultery, whether of the man or the woman, should meet with equal social disapprobation, and should be legally punished if committed during the breeding period.[47] In this connection it is interesting to note that Aristotle imposes a single standard upon both sexes.

The development and toughening of the infant's body should begin immediately. Crying and screaming should not be discouraged, as they contribute to a child's growth and give it exercise of sorts. Till it is seven, it will remain at home. What it hears and sees should be carefully censored till it is well grown. Nor should it come to the table or drink wine. But this does not mean that the literary and dramatic fare provided the adult, any more than his menu at dinner, should be restricted to what is fit for a child.[48]

Education ordinarily includes reading and writing, gymnastic exercises—which, incidentally, should not be overdone—drawing, and music. Little objection is ever offered to the first three, because they are considered "useful." Music, however, is sometimes attacked on the ground that it is not "practical" and has no other *raison d'être* except diversion. This objection Aristotle considers beside the point. In the first place, life is not all work. Though amusement should not be its end, the worker needs relaxation and finds rest in pleasure. Furthermore the real purpose of education is to teach us not so much how to make a living as to live on what we have made. "Nature herself . . . requires that we should be able not only to work well but to use leisure well," for "leisure is better than occupation and is the end." Of course technical education also is necessary. We must be taught things that will be of practical use, and we must be prepared for a business or a profession of some sort. But, at the same time, these things are

[47] VII, 15, 1334*b*, 25–16, 1336*a*, 2. [48] VII, 17.

means, not ends, and we must regard them as such. To place the accent of education upon them is the mark of an illiberal mind. "To be always seeking after the useful does not become free and exalted souls." For "leisure of itself gives pleasure and happiness and enjoyment of life, which are experienced, not by the busy man but by those who have leisure. . . . It is clear, then, that there are branches of learning and education which we must study merely with a view to leisure spent in intellectual activity, and these are to be valued for their own sake; whereas those kinds of knowledge which are useful in business are to be deemed necessary for the sake of other things." Consequently, there can be no disputing the fact "that there is a sort of education in which parents should train their sons, not as being useful or necessary, but because it is liberal or noble."[49]

Judged in the light of such a philosophy of education, Aristotle feels, music and, we might add, the other arts, and in general what we to-day call the humanities, have a paramount importance in any curriculum. Not only does music provide recreation and entertainment and the relaxation that "is of necessity sweet," because "it is the remedy of pain caused by toil," but it is a suitable occupation for a leisure nobly spent, and is an influence in forming character and developing the soul. But, and here Aristotle is far more liberal than Plato in his views on art generally, its function is not merely educational, nor is it to be subordinated to narrowly "moral" considerations. Not only must the intellectual pleasure given by certain kinds of music be taken into account, but the excitement and liberation of emotion by passionate music, so discountenanced by Plato, has also its place. Men are emotional as well as intellectual beings, and the excitement of their emotions gives them "an innocent pleasure" in the course of which "all are in a manner purged and their souls lightened and delighted." Nay more, emotional music may induce a religious and mystical experience from which they emerge "restored as though they had found healing and purgation." And finally, the lower classes, who are incapable of appreciating really good

[49] VIII, 3, 1338*a*, 31–1338*b*, 9.

music, are entitled to a lower order of diversion and to the "perverted modes and highly strung and unnaturally colored melodies in which they find relaxation and amusement." It is only in the education of the young that music should be censored in accordance with ethical considerations.[50] If we expand the term "music" to cover literature, the theatre, and the other arts, we have a point of view the breadth and sanity of which might well be taken to heart by many of our critics and censors to-day.

Aristotle's description of the ideal state now comes to a sudden end, leaving much unsaid and many incidental promises of further enlightenment unfulfilled. Perhaps, as we have already remarked, the discussion was never finished because of his wavering interest in ideal commonwealths, or perhaps the rest of it is lost. In any case it represents a passing and early phase in the development of his political theory, begun, apparently, while he was still a pupil at the Academy, and continued during his residence at Assos with his friend Hermeias. Book II, we are told, seems to have been written about the time Plato published the *Laws*,[51] and the description of the layout of the ideal city reflects the needs and the local atmosphere of the principality of Atarneus.[52] But the later books of the *Politics* (IV, V, VI) were not written, it would seem, till Aristotle had returned to Athens after the accession of Alexander, and much water had flown under the bridge in the interval. In any case, we now find him in a quite different and more realistic mood, inclined to a medical rather than a moral attitude, and ready to prescribe even to diseased political constitutions the best methods of circumventing their infirmities and keeping alive. Indeed, the books in question constitute a frank talk with oligarchy, democracy, and tyranny about their necessary regimen if they are to avoid the ever-threatening death from revolution invited by their diseased condition.

By the time, then, that Book IV was written it had become, in Aristotle's opinion, the business of the statesman and the legislator to concern himself not merely with ideal common-

[50] VIII, 5–7.

[51] Jaeger, *op. cit.*, p. 300.

[52] *Ibid.*, pp. 303 ff.

wealths but with those that are relatively best under a given set of circumstances, or that are even, both absolutely and relatively speaking, bad.[53] We begin first with the worst. Tyranny may be disposed of in a few words. Where the caprice of the tyrant happens to coincide with the will and to gain the consent of his subjects, a despotism may succeed in maintaining itself. But, if the despot governs simply to his own advantage against the will of his people, he is headed towards destruction. For "no freeman, if he can escape from it, will endure such a government."[54]

The chronic ailment of democracy is deficient or misplaced leisure. For, whether we have a property qualification for office, or one of birth, or none at all, it is plain that in a state where everybody's nose is to the grindstone carrying on business and trade nobody has time or leisure to govern, or the will to pay a special leisure class to administer the state. Instead, a lot of laws are passed and allowed to take care of themselves. There must, of course, be laws and a constitution, but of necessity they are general and cannot deal with special cases as they arise. In a good government they need to be supplemented by a constant and lively interest on the part of the upper classes in the running of the state. And for this leisure is necessary.

Still, it is better for a busy people "to set up the authority of the law and attend assemblies only when necessary," than to let the authority pass into the hands of a proletariat just prosperous enough and idle enough to be attending the assembly all the time. In that case, the people, not the constitution, "becomes the monarch," and "demagogues make the decrees of the people override the laws, by referring all things to the popular assembly." But the will of the people, if unrestrained by a constitution, is just as tyrannical as the will of a simple despot. "The decrees of the demos correspond to the edicts of the tyrant; and the demagogue is to the one what the flatterer is to the other." When democracy comes to mean the tyranny of the majority, it has reached its lowest ebb. The minority rule of oligarchies, however, is subject to similar differences of qualification for office-holding, and, when wielded

[53] IV, 1. [54] IV, 10.

by a small hereditary class subject to no constitutional restraints, becomes equally tyrannical.[55]

The wise legislator, intent upon the best and at the same time a practicable form of government, will try to strike a happy mean between oligarchy and democracy, so far as qualification for citizenship and election to office is concerned,[56] and to build up a large, prosperous middle class which may hold the balance of power between the upper class and the proletariat. "For the addition of the middle class turns the scale, and prevents either of the extremes from being dominant." Furthermore, "the portion of the state which desires the permanence of the constitution ought to be stronger than that which desires the reverse," and the middle class always swells this element, even when it does not constitute it. Without such a middle, arbitrating factor, oligarchical legislators are always trying to get round the people by offering them the shadow of power without the substance. And democratic legislators "have counter-devices" of the same sort.[57]

Generally speaking, in the well-balanced state the government should be confined to those who carry arms, the property qualification for citizenship should be such that the citizen class exceeds the non-citizens, and the poorer class excluded from the franchise should be justly and humanely treated. For "even if they have no share in office, the poor, provided only they are not outraged or deprived of their property, will be quiet enough." To a state of this sort Aristotle applies the name "polity." [58]

There follows a discussion of the various forms of the legislative, executive, and judicial branches under different systems of government.[59] Into this we have not the time to enter. But the fact that it is realistic in tone, and that it prescribes relatively to the needs of different constitutions without making invidious distinctions between them, helps introduce us to Book VI, which Aristotle devotes to patching up things as they are and giving them a new lease of life. After all, he might have

[55] IV, 4, 1291*b*, 15–6, 1293*a*, 34.
[56] IV, 9.
[57] IV, 11–13, 1297*a*, 35.
[58] IV, 13, 1297*a*, 35–1297*b*, 34.
[59] IV, 14–16.

felt, polity and a prosperous middle class holding the balance of power existed, like Plato's commonwealth, only in heaven. The governments by which he was confronted were out-and-out oligarchies or democracies. It might take a radical operation to cure them, but as they stood they could be rendered healthier and more comfortable by merely palliative measures.

If then we are to have democracies, we must, as Aristotle points out, accept for better or worse the idea of equality, the rule of the people, laws founded on the will of the majority, and the consequent disputes between the majority and the minority as to what is right and just for all alike.[60] But government on these principles may, he thinks, work not so badly with an agricultural or a pastoral people. For such a people is busy and contented with its pursuits, cares little for holding office, is not jealous of its officers, and, provided it retains the power of deliberating in assembly and selecting the magistrates and calling them to account, is generally willing to let the direction of the state slip into the hands of the more able. Thus everybody is satisfied and happy. "The good and the notables will not be governed by men who are their inferiors, and the persons selected will rule justly because others will call them to account." But, once let the inferior classes insist on removing the power from the hands of those best fitted to govern and on exercising it themselves, and the trouble begins. In that case we get class-hatred, and a rising resentment of the upper strata against the lower that may end in revolution.[61]

The legislator, then, will find it far less difficult to establish a democracy than to devise means for preserving it once it is set up. If a democracy is to last it must refrain from attacking its eminent men and from confiscating the property of the rich. Nor should surplus revenues be given as largess to the poor. "Such help is like water poured into a leaky cask," since "the poor are always receiving, and always wanting more and more." On the other hand, since "extreme poverty lowers the character of the democracy," surplus wealth may be used to set the poor up in little farms or in enabling them to "make a beginning in trade or husbandry." Moreover, "it

[60] VI, 2. [61] VI, 4.

is also worthy of a generous and sensible nobility to divide the poor amongst them, and give them the means of going to work."[62] Measures like these are good preventive medicine, and the worse, constitutionally, the sort of democracy one is trying to keep alive, the more necessary they will be.

The oligarchic, like the democratic disease, is of varying severity. In its milder form, the minority governs according to law and is well advised to have two standards of qualification, one for the higher, the other for "the humbler yet indispensable offices," and to see that the citizens exceed in strength the non-citizens. The most virulent and precarious type presents us with a small clique governing tyrannically. This answers "to the extreme democracy, which being the worst, requires vigilance in proportion to its badness." To preserve an oligarchy, a strong, heavily armed force, preferably cavalry, is necessary, "for this service is better suited to the rich than to the poor."

To raise a large body of light-armed troops or a big naval contingent from the masses is dangerous, since these forces will be democratic in spirit and likely to turn against the governing class. The higher offices should be made so expensive that the people will not aspire to them, and the rich should keep the public entertained by magnificent spectacles, and should decorate the city with "votive offerings and buildings" to serve as "memorials of their munificence," and to impress upon the people the desirability of the existing government. Mean and miserly oligarchies, which, Aristotle complains, were the fashion of his own times, are no better than so many petty democracies.[63]

The rest of Book VI is given to an enumeration and description of the various offices necessary to the government of a state. Into this we need not follow Aristotle, except in so far as he points out that even in democracies the aristocratic and the oligarchic factors also appear, in the shape of the chief magistrates and of a "senate" often entrusted with "both the introduction and the ratification of measures" and with presiding over the assembly.

[62] VI, 5.

[63] VI, 6–7.

Finally, Aristotle turns to an analysis of the malady that constantly threatens every form of government—revolution. The causes of revolution are manifold and often trivial. The desire for equality or for superiority, avarice, insolence, fear, disproportion among the classes composing the state, too great an immigration of foreigners—all may precipitate a crisis. And the slightest of disturbances may sometimes lead to fatal results.[64] In democracies, revolutions "are generally caused by the intemperance of the demagogues," who, to curry favor with the people, threaten the rich in one way or another, and force them to combine in self-protection and overturn the popular government. Or, if the demagogue happens to be a general, he can make himself tyrant without much difficulty.[65] Still, "democracy appears to be safer and less liable to revolution than oligarchy. For in oligarchies there is the double danger of the oligarchs falling out among themselves and also with the people; but in democracies there is only the danger of a quarrel with the oligarchs. No dissension worth mentioning arises among the people themselves." [66]

After indicating these two causes of oligarchic revolution—the oppression of the people by the governing class, which is likely to end in a popular uprising and the establishment of a democracy, and faction within the governing class itself, which frequently inspires some one oligarch to espouse the cause of the people and to become a demagogue and eventually a tyrant [67]—Aristotle turns to the dangers threatening aristocracy and constitutional government. Here he finds once more a disposition of the many to rebel against the few, however good, and also the temptation that may beset some outstanding member of the aristocracy to seize the power and reign alone. Again, aristocracies tend to become grasping and plutocratic, and thus to expose themselves to the ill-will to which oligarchies are subject. Or there may be a real defect and "deviation from justice in the constitution" of the polity or aristocracy, such as "the ill-mingling of the two elements

[64] V, 1–4.
[65] V, 5.
[66] V, 1, 1302*a*, 9–14.
[67] V, 6.

democracy and oligarchy," with an undue proportion of one element over the other.[68]

To guard against revolution, "there is nothing which should be more jealously maintained than the spirit of obedience to law, more especially in small matters; for transgression creeps in unperceived and at last ruins the state, just as the constant recurrence of small expenses in time eats up a fortune." Again, political devices such as are used so often by both oligarchic and democratic leaders to deceive the people should not be employed. And the governing class should adopt every means to preserve internal harmony and keep on good terms with the governed. To this end it should be fair to all, never wronging "the ambitious in matters of honor, or the common people in a matter of money," but ready to recognize and promote worth and ability wherever it finds it. Furthermore, its favors should be moderate and long-drawn-out rather than short and violent, "for men are easily spoilt; not every one can bear prosperity." Too great a concentration of power and wealth in a few hands should be avoided. "Above all, every state should be so administered and so regulated by law that its magistrates cannot possibly make money." The people do not mind not holding office, but they are irritated at the thought "that their rulers are stealing the public money." Neither do the rich like to feel that they are being bled for the benefit of the masses. Hence, in democracies they "should be spared; not only should their property not be divided, but their incomes also, which in some states are taken from them imperceptibly, should be protected." To ensure fairness and honesty, the state finances must be scrupulously administered.

Finally, it goes without saying that, whatever the form of government, its high officials should possess loyalty to the constitution under which they live and a sense of justice proper to it, as well as virtue and political ability. If one has to choose between virtue and ability, skill is preferable to virtue where military commanders are concerned, virtue to ability when it is a question of civil offices of trust. The majority of the citizens, too, must be loyal to the established government. In a

[68] V, 7.

democracy, however, the successful demagogue would do well to placate the rich instead of quarrelling with them, just as the clever oligarch should make himself out the people's friend. Above all, the system of education should be such as to inculcate respect for the system in force and to keep the upholders of that system hardy and prepared. In an oligarchy, for example, it is suicidal to bring the children of the rich up in luxury, and at the same time to toughen the offspring of the poor by exercise and toil. So, too, in a democracy it is fatal to educate the masses to a false idea of freedom and make them feel that discipline and obedience to law are slavery.[69]

Kings, who reign with the consent of the governed, are seldom destroyed by external causes. They come to grief rather through quarrels in the royal family, or by an assumption of tyrannical rule by the monarch, especially if he behaves like a despot when he has not the despot's power. "For there is an end to the king when his subjects do not want him, but the tyrant lasts, whether they like him or not." [70] Tyranny has all the vices of both an oligarchy and a democracy. Its end is wealth. Its method is to "distrust the people . . . and deprive them of their arms." But like democracy it wars also upon the notables and destroys them secretly or openly. The insults it heaps upon the upper classes and its confiscation of their property drive them to rebellion. Everywhere it breeds fear and hatred, and contempt as well, if the tyrant is soft and luxurious. Then again, the tyrant is a tempting mark for a man who wishes to gain notoriety by some startling deed. "There are men who will not risk their lives in the hope of gains and honors however great, but who nevertheless regard the killing of a tyrant simply as an extraordinary action which will make them famous and honorable in the world; they wish to acquire, not a kingdom, but a name." [71]

The prescription for keeping a king well is very simple. "Royalty is preserved by the limitation of its powers. The more restricted the functions of kings, the longer their power will last unimpaired; for then they are more moderate and not

[69] V, 8, 9.
[70] V, 10, 1312*b*, 37 ff.
[71] V, 10, 1311*a*, 9–11, 1313*a*, 17.

so despotic in their ways; and they are less envied by their subjects." That some old kingships are still in existence is due, Aristotle feels, to their adoption of this limited character. The tyrant, however, is a more complicated case. To stave off revolution he may adopt either of two diametrically opposed treatments. On the one hand, he may play the heavy tyrant. If he follows that method, he must lop off the heads of all men of spirit; prohibit clubs, assemblies, education, discussion, and everything "which is likely to inspire either courage or confidence among his subjects"; establish an elaborate system of espionage; "sow quarrels among the citizens"; and embroil friends with friends, "the people with the notables, and the rich with one another." Also he should impoverish his subjects "and by keeping them hard at work, guard against conspiracy." A foreign war, too, helps at a pinch, as the citizens are thus kept busy and need the despot as a leader. All in all, this drastic form of treatment resolves itself into three things —sowing distrust among subjects, taking away their power, and humbling them.[72]

On the other hand, the tyrant may avert rebellion and overthrow not so much by force as by guile. He may give the appearance of governing as a constitutional king, taking care, however, to keep sufficient power to rule his subjects. In that case, he must "pretend a care of the public revenues" and not let the people "see their hard-won earnings snatched from them and lavished on courtesans and strangers and artists." He must keep accounts, levy taxes, ostensibly at any rate, only for state purposes, and pretend that the funds in his charge really belong to the public and that he is only the treasurer and guardian of them. His manners should be not harsh but dignified, and he should be reasonably virtuous, "or at any rate should not parade his vices to the world." But "whatever virtues he may neglect, at least he should maintain the character of a great soldier and produce the impression that he is one." Also, it is a good plan to seem devoutly though not foolishly religious. Nor should he neglect to "honor men of merit and make them think that they would not be held in more honor by

[72] V, 11, 1313*a*, 18–1314*a*, 29.

the citizens if they had a free government." Punishments of all sorts, however, should seem to come not from him but from the courts. Above all, he should abstain from outraging or insulting people by offenses against their property or person, since revenge at a real or fancied slight is one of the most common and virulent causes of assassination.[73]

Such are the two ways of being a successful tyrant. They are set forth gravely, impartially, and dispassionately, and the despot is left free to choose between them. At the same time, Aristotle points out, tyranny and oligarchy are in the nature of things the shortest-lived forms of government. The book ends with a criticism of Plato's cyclic changes, and of the reasons assigned in the *Republic* for the progressive degeneration of the state.

We turn back now to Book I, which, as we have already said, is regarded by some critics as a kind of addendum calculated to show the naturalistic basis of the state and of social institutions. The primitive human unit, Aristotle tells us, is the family, which springs from the fact that men reproduce sexually and exist as male and female. This first association is instinctive not deliberate. Different degrees of ability are also innate and fundamental, and give rise to the equally natural distinction between master and slave and to man's appropriation, not only of other persons, but of animals and property to his uses. These adjuncts are also part of the family, which may now be described as "the association established by nature for the supply of men's everyday wants." Next, "when several families are united and the association aims at something more than the supply of daily needs, the first society to be formed is the village." And finally, "when several villages are united in a single complete community, large enough to be nearly or quite self-sufficing, the state comes into existence, originating in the bare needs of life, and continuing in existence for the sake of the good life." But "if the earlier forms of society are natural, so is the state, for it is the end of them, and the nature of a thing is its end. . . . Hence it is evident that the state is a creation of nature and that man is by nature a

[73] V, 11, 1314*a*, 29–12, 1316*b*, 27.

political animal." Indeed, he "is more of a political animal than bees or any other gregarious animal," since his native power of speech enables him to make sounds that are not, as in other creatures, mere cries of pleasure and pain, but signify and communicate the normal values upon which the social structure rests.

Plainly, then, seeing that each human individual is a political animal and naturally part of a social whole, separated from which he is no more self-sufficient and can no more survive than the hand or the foot without the body, "the state is by nature prior to the family and the individual." Only beasts or Gods can live without society; the character of man demands that he attain his perfection in communal life. In his social setting he is the best of animals, but "when separated from law and justice he is the worst of all . . . the most unholy and the most savage . . . and the most full of lust and gluttony."[74]

The state, however, is not merely natural and instinctive. It engages man's higher faculties of reason and morality and is deliberately developed with a view to procuring the best and happiest life. It rests not only upon the gregarious nature of human beings but upon a conscious purpose to attain a good.[75] "A social instinct is implanted in all men by nature, and yet he who first founded the state was the greatest of benefactors."[76]

Further discussion of the state, Aristotle feels, may well be prefaced by a detailed study of the family, since "the state is made up of households." The art of managing a household is politics in miniature, and in the family the origins and the naturalness of social institutions are seen with great simplicity and clearness. Thus the family, besides organizing sexual relations, also exhibits the fundamental character of property and of slavery. The family is not merely man and wife, parents and children; it is belongings, including other human beings in a servile capacity. Slavery is not a violation of nature, as some contend. Men are not born free and equal; "from the

[74] I, 2.
[75] I, 1, 1252*a*, 1–5.
[76] *Ibid.*, 1253*a*, 29–30.

hour of their birth, some are marked out for subjection, others for rule." Everywhere "a distinction between the ruling and the subject element comes to light," not only in living creatures but in animate objects. "It originates in the constitution of the universe." It is seen in the dominance of the soul over the body, of reason over the passions and the appetites, of human beings over animals, of man over woman.[77]

Still, the legal institution of slavery as it is developed in the state may not follow the lines laid down by nature, as, for example, when a conquered population is enslaved wholesale by the victors. Here the opponents of slavery are right. Freemen by nature ought not to be slaves. Indeed, they cannot be so really, whatever the fortune of war or the legal situation may be, since "no one is a slave who is unworthy to be a slave." The only true and permissible slavery is founded on moral and natural considerations.[78]

Granted these considerations, it is right that those who are naturally slaves should receive a training suitable to their servile destiny and occupation—just, we might say, as domestic animals are trained for their special uses. Finally, it will be observed that the inborn distinctions which render slavery natural are also those which justify absolute monarchy.[79]

As with slavery, so with property. It is natural for the human animal to hunt, to fish, to till the soil, to lay up sustenance. "Property, in the sense of a bare livelihood, seems to be given by nature herself to all, both when they are first born (in the form of mother's milk), and when they are grown up." The development of society superadds to this primitive kind of property the highly complicated economic life of the modern state—with its exchange, its barter, its retail trade, its money, its banking, its lending, and its breeding money from money through interest. Here, as in the case of slavery, Aristotle draws a line between the natural and the artificial and conventional, and finds much to deplore in the economic system of his time. Big business merely for the sake of business, getting rich just in order to get rich, both exceeds the natural bases and

[77] I, 5.
[78] I, 6.
[79] I, 7.

limits of property and thwarts the natural end of the state, which is virtue and happiness. And "of all modes of getting wealth," he says, that of putting money out to interest "is the most unnatural." For "money was intended to be used in exchange but not to increase at interest."[80]

Just as the family relation of master and slave is the prototype of absolute monarchy in the state, so that of father to child underlies the political institution of constitutional kingship, and that of husband to wife the form of government known as constitutionalism. The "constitutional" character of the two latter relations rests upon the fact that the wife and child are free beings, endowed with deliberation and choice, though in a lesser degree than the husband. Therefore, in spite of their dependent place, they share in the moral excellence and the happiness for the sake of which the state exists, and are to be regarded as among the ends, not the means, of political life. But slaves have no such status. Though they are rational and moral beings, they have no will or choice of their own. Politically speaking, then, they are wealth, and like other wealth are to be treated as means to the excellence and virtue of their masters.[81]

All in all, then, Aristotle has shown to his own satisfaction that the state is ordained by nature, that institutions like the family and property are part and parcel of the human organism, and that the various forms of government all rest upon and express primitive and instinctive relationships. With this assurance we may take leave of his *Politics*, and pass on to our final chapter—his theory of poetry and the fine arts.

[80] I, 8–10. [81] I, 12–13.

## CHAPTER XI

## ARISTOTLE'S RHETORIC AND POETICS

### I

Athenian society was so constituted that every citizen had to be both his own congressman and lawyer, and this situation gave to the study of rhetoric, or the art of getting on in the assembly and the lawcourts, a place at Athens similar to that enjoyed by economics in the American scheme of higher education. The contempt Plato felt for the subject, and his frequent invective against it as the art of worldly success at any price, testify to its popularity. Aristotle himself had no high opinion of its ideals and methods, but he treats it in the spirit of his discussion of current politics, medically, not morally, with perfect detachment, although not without a quiet malice. Rhetoric, he tells us, is the "faculty of observing in any given case the means of persuasion." [1] The rhetorical artist is one who has the power so to impress his own personality upon his audience, so to stir their emotions, and so to manipulate his language that whatever he says will seem credible to them and win their assent.[2] Whether he uses this power in the interests of truth or falsehood, of right or wrong, makes no difference. Rhetoric is good or bad rhetoric according as it wins its case. Aristotle's business was not with ends, but with the ways and means best calculated to attain them, whatever they might be. His study of them resolves itself, quite properly, into an essay on prose style, or at least, on the style of such prose as enters into exhortatory and persuasive eloquence.

Reasoning, or at any rate the semblance of reasoning, must play an important part in oratory. But where cold logic will work, oratory is unnecessary. The object of the rhetorician is not to make evident the self-evident, but to make the merely

[1] *Rhet.*, I, 1, 1135*b*, 26. [2] I, 2, 1356*a*, 1–21.

probable appear certain. He will, then, drive his points home by suggestive example instead of true induction, and by series of propositions in which the probability of the consequent is irresistibly insinuated by the antecedent rather than by hard and fast syllogisms in which the conclusion follows of necessity from the premises.[3] Moreover, these examples and quasi-syllogisms must be varied to suit the personality of the individual one desires to persuade, or the character of the audience one wishes to sway, as, for instance, the courts, or the assembly, or the crowd on some great ceremonial occasion. But in any case the successful orator must be thoroughly acquainted with his subject, with the relative values attributed by his audience to the various phases of life, and with the vulgar meanings of such appealing terms as wealth, honor, fame, happiness, good, bad, and the like. Knowledge of this sort is particularly necessary for the politician, and for what we might call the ordinary public speaker, whose chief business is to praise themselves and blame their adversaries effectually.[4]

Aristotle next turns to pleading in the lawcourts. The good lawyer must be acquainted with the motives and the psychology of the wrong-doer, the conditions that make for successful crime, and the kind of person who is apt to be the victim.[5] Then, too, he must know his law, both written and unwritten, in order to appeal from the one to the other, as best suits his case. He must be expert in handling evidence, and in minimizing or exaggerating the value of the testimony of witnesses, according as it is unfavorable or favorable to him; in discrediting adverse evidence obtained under torture, or as we might say to-day, by third-degree methods; in implying perjury in his opponents, and impressing the judges with his own respect for the sanctity of an oath; and in increasing or diminishing the apparent importance of a contract, when civil rather than criminal cases are concerned.[6] Ways and means of this sort are obviously non-technical. Their eloquence is not that of the orator, but of the facts discovered or invented by him. But

[3] I, 2, 1356*a*, 21–1358*a*, 35.
[4] I, 3–9.
[5] I, 10–14.
[6] I, 15.

the proper accenting of this non-technical material is part and parcel of the rhetorician's art.[7]

Since oratory, to whomsoever addressed, is primarily an appeal to the *emotions* rather than the reason, Aristotle now proceeds to define and catalogue them. In general they may be described as "all those feelings that so change men as to affect their judgments, and that are also attended by pleasure and pain."[8] The primary appeal that an orator should make to his audience is that of his own pleasing personality. He must take care to impress it as a man of common sense, of good moral character, and of good will.[9] But in order to engage its sympathies and play upon its feelings, he must understand the nature of the various emotions, and how to excite them. He must be expert both in stirring up anger and in turning away wrath.[10] He must be able to instil friendliness or hatred;[11] to work upon the fears of his listeners, or to inspire them with confidence; to make them feel shame or shamelessness;[12] to impress them with his own kindness and the unkindness of his adversaries; to appeal to their pity or to excite their indignation, their envy, or their spirit of emulation.[13] Needless to say the orator will apply these various excitants, not with any respect to the merits of his case or cause, but simply to ensure its victory.

In evoking the emotions and affecting the judgment of his hearers by means of them, the rhetorician must, of course, take into account the different degrees of sensitiveness to different sorts of appeal that come from age. The old do not respond to the same stimulants as the young. Their outlook on life is different. So, too, the reactions of maturity are those neither of old age or youth, but somewhere between. Again, gifts of fortune like good birth, wealth, power, and their opposites affect the character and create prejudices with which it is necessary to reckon.[14]

However, there are certain tricks and rules that may be ap-

7 I, 2, 1355*b*, 36; 15, 1375*a*, 21–24.
8 II, 1, 1378*a*, 20 ff.
9 *Ibid.*, 1378*a*, 6 ff.
10 II, 2–3.
11 II, 4.
12 II, 5–6.
13 II, 7–11.
14 II, 12–17.

plied to every sort and condition of audience. Thus, general rules may be laid down for arguing plausibly the possibility or impossibility of one occurrence from that of another, and formulae for reconstructing the past in a credible and appealing manner can be worked out. So, too, predictions of the future must follow given lines, if they are to carry weight.[15] All types of audience are susceptible also to the use of example, of the rhetorical syllogism, and of maxims. Examples may either be drawn from the past or be invented. They may assume the form of the parallel or of the parable. Parables are easier to invent than parallels are to find, and are more suitable for popular orations, but parallels have more political effect. Maxims correspond in a way to the premises of the syllogism; their application to the situation in question is like the conclusion. They must always pretend to be universally true, and they should seem to teach a moral lesson. They appeal especially to people of little intelligence who love to hear "the opinions which they hold themselves about particular cases" enunciated as if they were universal truths enshrining fundamental moral principles. The orator who skilfully chooses or invents maxims that express the beliefs and standards of his hearers gets a reputation for being "a man of sound moral character" and makes a correspondingly good impression.[16]

To string maxims together properly and to apply them in a telling manner is the gist of oratory. But in order to distort facts to his advantage the orator must first know them for what they really are. He must be acquainted with history, or law, or finance, before he can use them as a basis for argument. This is indispensable. There are, however, various ways of putting this knowledge to the rhetorician's own uses. Some of them, which Aristotle proceeds to enumerate at too great length for us to follow, are formally correct. That is, propositions are strung together coherently, and a suggestion is drawn from them acceptable to the audience. But in many cases, to gain his effect the orator has not even to go through this formality. He may carry the day by a *bon mot*, or a play upon

[15] II, 18–19. [16] II, 20–21.

words, or even by the clever use of an out-and-out logical fallacy.

Naturally, the orator must also be ready to answer objections and refute the attacks of opponents. But when Greek thus meets Greek, the one employs the other's methods. A swelling array of plausibilities can be collapsed by the prick of a contrary doubt. Examples *pro* can be countered by examples *con*, or, if they are too numerous, can be sidetracked by the suggestion that they are beside the point. Uncomfortable facts can often be deprived of their sting by a *non sequitur*, or, if that is impossible, by casting suspicion on the reality of the fact itself. Of course, if we cannot get round the fact or dodge its impact, we might as well throw up the sponge.[17]

In the third book, Aristotle takes up the question of literary style. "It is not enough to know *what* we ought to say; we must also say it *as* we ought." The first question is, naturally, "how persuasion can be produced from the facts themselves." The second is how to set these facts out in language. A third would be the proper method of delivery; but this last, Aristotle points out, has hitherto been greatly neglected, important though it is among the appearances with which alone "the whole business of rhetoric is concerned."[18]

"Style to be good must be clear . . . and appropriate . . . Clearness is secured by using the words . . . that are current and ordinary." Appropriateness in prose style means the avoidance of "both meanness and undue elevation." The great thing is to be natural. "Naturalness is persuasive, artificiality is the contrary; for our hearers are prejudiced and think we have some design upon them, as if we were mixing their wines for them." It is bad taste to overdo the use of compound words, to employ unusual ones, or to indulge in "long, unreasonable, or frequent epithets," and unsuitable metaphors and similes. Language must correspond to its subject, reflect the mood of the speaker, and be true to his personal character. The rustic must not talk like the educated man, the man like the woman, the youth like the old man, and vice versa. "We must neither speak casually about weighty matters, nor solemnly about

[17] II, 24.

[18] III, 1, 1403*b*, 15–1404*a*, 2.

trivial ones." In describing outrage the language of anger should be employed; "the language of exaltation for a tale of glory," etc.[19]

Prose should be "neither metrical nor destitute of rhythm." But certain rhythmical effects should be sedulously avoided. Sentences should never end with a short syllable, which gives "no effect of finality." They "should break off with the long syllable," which is a kind of natural period.[20] Furthermore, prose should be "either free-running, with its parts united by nothing except the connecting words," or compact and "antithetical." "Free-running" prose is as a rule too indefinite, and "the end is never in sight." The compact style with its divisions into separated definite statements is preferable. These statements and their constituent parts should be neither too short nor too long, but compassable in a single breath. They may either be supplementary or antithetical to one another.[21]

Discourse should also sparkle with "lively and taking sayings. Their actual invention can only come through natural talent or long practice," but the means for producing the effect can be defined. "Both speech and reasoning are lively in proportion as they make us seize on a new idea promptly." This they do by the use of vivid, well-chosen antitheses, metaphors, and similes which actually "set the scene before our eyes." Generally speaking, words expressive of activity are best for "making our hearers *see* things." Besides this visualizing power, liveliness has also an element of surprise. "Because the hearer expected something different, his acquisition of the new idea impresses him all the more. His mind seems to say 'Yes, to be sure; I never thought of that.' The liveliness of epigrammatic remarks is due to the meaning not being just what the words say." So, too, with riddles and jokes. "A new idea is conveyed" and "the word which comes is not what the hearer imagined."[22]

Different circumstances—written prose or spoken oratory, the assembly or the lawcourts—demand different styles. "The written style is the more finished; the spoken better admits of

[19] III, 2–7.
[20] III, 8.
[21] III, 8–9.
[22] III, 10–11.

dramatic delivery." Again, speeches addressed to a large gathering should be less finished than those addressed to a law-court, or to a single judge.[23] But in any case, "a speech has two parts. You must state your case, and you must prove it." To do the one without the other leaves things in the air. The statement should also have an introduction which may be a declamation of praise or censure or a simple appeal to the audience. It should have "nothing to do with the speech itself." It merely has to do with "the weak-minded tendency of the hearer to listen to what is beside the point." In pleading before the courts, the introduction should be directed "to removing or exciting prejudice" and to ingratiating the lawyer with the judges. So, too, in political speeches it is well to begin by arousing or dispelling prejudice, or by making "the matter under discussion seem more or less important than before." Prejudice can be dissipated or excited in many ways. It can be dissipated by direct denial of its grounds, by counter-charges, or by some "hard-luck" or "good intentions" story; it can be excited by imputing the worse of two possible motives, or by obscuring a man's many good qualities with one that is bad.[24]

Upon the introduction follows the statement of the subject. Here the narration should be so manipulated as to create an atmosphere favorable to your cause or case. Assume a moral tone. "Do not let your words seem inspired so much by intelligence . . . as by moral purpose." A display of intelligence shows nothing but good sense, but moral purpose is indicative of good character. Dwell particularly upon details expressive of the emotion you wish to have attributed to yourself or your opponent. "These details carry conviction: the audience take the truth of what they know as so much evidence of the truth of what they do not." Create immediately the right impression of yourself and of your adversary. Keep guaranteeing the truth of everything you say, and be ready with such explanations and particulars as the audience will expect.[25]

Next comes the argument. In ceremonial speeches this will

[23] III, 12.
[24] III, 13–15.
[25] III, 1*b*.

consist largely in expatiating upon the nobility or usefulness of the subject under discussion. Proof is uncalled for in most cases. Political argument consists largely in discrediting your opponent's proposals as impracticable, unjust, useless, or unimportant. "Note any falsehoods about irrelevant matters—they will look like proofs that his other statements also are false." The difficulty with political argument is that it deals in "futures" alone; also that it "affords few chances for those leisurely digressions in which you may attack your adversary, talk about yourself, or work on your hearers' emotions." This latter disadvantage can, however, be offset by a judicious interspersing of well-timed attacks upon individual people or, in other words, of the *argumentum ad hominem.* Still, pleading in the lawcourts is much easier. There you are dealing with present fact, not with conjectures regarding the future. "Besides . . . you have a basis in the law; and once you have a starting point, you can prove anything with comparative ease."

Moreover, and this holds true of all oratory, where proofs give out, "fall back upon moral discourse: after all, it is more fitting for a good man to display himself as an honest fellow than as a subtle reasoner."[26]

Refutation is part of the argument, not a separate division. The procedure of refutation will vary according as you are first or last on the programme, and according to the nature of the opposing arguments. Well-placed questions are very useful in tripping up your adversary. Often by means of them you can involve him in an absurdity, a self-contradiction, or an evasion. By the same token you must be ready to deal with them. Jests are also sometimes useful. Irony, however, is more suitable to a gentleman than buffoonery.

After the argument we have the epilogue. Its object should be to reinforce the feelings and prejudices, favorable and unfavorable, by arousing which you have determined the attitude of your audience towards yourself and your opponent. This you do by leaving as a last impression the feeling that you are a noble and truthful man, whereas your adversary is a rogue

[26] III, 17, 1417*b*, 21–1418*b*, 4.

and a liar, and that the facts supporting your side of the case are important, whereas those upon which your opponent relies are of no importance whatsoever. Again, you must rekindle the emotions of your hearers, and leave them once more aflame. Finally you "review what you have already said," summarize your arguments, praise yourself for having done what you set out to do, compare your frank and efficient handling of the case with that of your adversary, and end with a staccato, machine-gun fire of "I have done. You have heard me. The facts are before you. I ask for your judgment."[27]

This and other excellent advice, amply illustrated by references to literature in general and to authors of the immediate past, Aristotle gives to the would-be successful lawyer, politician, and ceremonial orator. We cannot help feeling that he found considerable private amusement in his lectures on rhetoric. Nor do we wonder that they were so crowded of an afternoon that he could not walk about as he talked, but was forced to address his hearers sitting down.

II

As the *Rhetoric* deals with the construction and the form of persuasive prose, so the *Poetics* is devoted to a discussion of the style and structure of dramatic poetry. The first book, which treats of tragedy, with incidental remarks about comedy and the epic, has alone come down to us. The second, whose subject was comedy, has been lost. But short as the extant portion of the *Poetics* is, no work of Aristotle has been more influential in its field or provoked more discussion than the brief first book. It is still, so far as it goes, one of the authoritative treatises on aesthetics, and the canons it lays down dominated for centuries Continental European drama. It also throws an interesting light on Aristotle's attitude towards the function of the fine arts in general.

Poetry and most music, dancing, painting, and sculpture, we are told, all imitate nature in their several ways.[28] The

[27] III, 17, 1418*b*, 5–19.

[28] *Poet.*, I, 1. (It will be remembered that the choruses in the Greek drama sang their lines, and danced as they sang.)

means employed by dancing and music are rhythm alone and rhythm combined with harmony. Poetry uses rhythmic or metrical language, and tragedy and comedy avail themselves not only of verse but of harmony and rhythm, music and the dance, as well. These means, like the imitative essence of poetry, have their sources deep in human nature. Man is naturally endowed, not only with a sense of harmony and rhythm and metre, but with a capacity and love for imitation that is one of his advantages over the lower animals. He delights in imitating and in words of imitation, even if the subject imitated be in itself painful. Not only are his senses pleased, but his intellect is stimulated. The imitation suggests the original. He gathers "the meaning of things" from it. He learns, and learning is enjoyment. Out of the primitive representations and improvisations that expressed this native tendency to imitate by declaiming, dancing, and singing, poetry of all sorts arose.[29]

But what is the "nature" that art imitates, and what do we really mean by imitation? Plato, we may remember, had insisted that art imitated the sensible world, and that its imitation was a mere transcript or copy. Hence the work of art was simply a copy of a copy—the sensible world being a reproduction of the Ideas—and was in the second remove from truth and reality. Aristotle's view is quite different. Art does not simply reflect the particular; it penetrates it and grasps and expresses aspects of it that are universal. Poetry, he tells us, is for this reason "something more philosophic and of graver import than history, since its statements are of the nature rather of universals, whereas those of history are singulars." Moreover, it describes not what has been—matters of fact—but rather what might, and, aesthetically speaking, ought to be.[30] It may even indulge in impossibilities, if these are more beautiful. Art, in a word, always idealizes, and the "artist ought to improve" on his model.[31]

[29] *Poet.*, I, 4–5.

[30] 9, 1451*a*, 37–1451*b*, 7. *Cf.* Butcher, *Aristotle's Theory of Poetry and Fine Art*, pp. 150 ff.

[31] 25, 1461*b*, 9–15.

Again, imitation, even of the universal, is not for Aristotle mere bald restatement. It is rather a kind of divination, an insight into what Nature is trying to say with the matter at hand, and an ability to forestall her meaning and make her hidden and often stuttering purposes articulate.[32] But, and here there is perhaps something in what Plato says, the artistic interpretation of Nature's meaning is given in terms, not primarily intellectual, but sensible and pictorial. It is not merely an account of what she is trying to say; it must also mimic her voice and re-echo the sound of her speech,[33] and do so in such a way as to caress the listening ear and seem beautiful to it.

Finally, Aristotle seeks to free imitation from the moralistic bondage to which Plato had subjected it.[34] Artistic activity and the impression produced upon others by its exercise are ends in themselves, so far as any single factor in the all-embracing end of human happiness in general can be regarded as self-justified, when considered in isolation from the others. Art for art's sake, we may feel Aristotle would have contended, is a sounder doctrine than virtue for virtue's sake. Art is not the servant of virtue, but of that wider good from its subservience to which virtue also, as he so bluntly tells us in the *Ethics*, gets its only justification. The relation between the two is not that of master and slave, as Plato would have had it, but of two servants of the same lord. Art does not have to go outside its own sphere to find the final standard by which its works are judged good or bad.[35] Its purpose is not moral edification, but, he says, to give pleasure—that very pleasure of which Plato was so afraid.[36]

Nay more, to be justified, Art does not have to give even that "higher" enjoyment which is a positive and abiding element in the rational activities and essential happiness of man. At the production of such enjoyment the more serious and valuable works of art are, to be sure, aimed. But mere recreation and restful amusement, such as is afforded by a game or a pastime, is also a justifiable end of artistic endeavor, and a work

32 *Cf.* Butcher, *op. cit., loc. cit.*
33 *Cf.* Butcher, *op. cit.,* pp. 124 ff.
34 *Cf.* Butcher, *op. cit.,* pp. 215 ff.
35 Butcher, *op. cit.,* pp. 220 ff.
36 *Poet.,* 4, 1448*b,* 4 ff.

of art that effects this, though it may not be of so "high" an order, is not therefore to be condemned. This point, it will be remembered, Aristotle brings out in the *Politics*.[37] But the distinction between "higher" and "lower," we should take care to note, does not involve any lugging in of moralistic standards. It rests solely on the difference between the pleasure accompanying rationalized and reflective activity and the pleasure we take in being diverted and relaxed from the serious business of life when we are fatigued. Since amusement and relaxation do not constitute happiness, but figure in it only incidentally,[38] the pleasure that attends them is less essential than that which comes from the effort of thinking about what we see, in which human nature finds its highest and most complete expression. But in itself it is innocent. No moral fault can be found with it. It is bad only when it is overemphasized. In short, both sorts of pleasure are good, and both have their place in a perfected and happy life.

What Aristotle is here trying to do is, apparently, to reach purely logical and aesthetic standards of judgment that shall be free from a moral bias. The goodness or badness of a work of art is to be determined by such tests alone. At least these are the only criteria that Aristotle uses in his own criticisms of the drama. For that matter, the moralistic demand that a play shall always "teach a lesson" by exhibiting vice punished and virtue triumphant, he explicitly ridicules as the demand of a second-rate audience. The pleasure taken in these edifying endings is not pleasure of the aesthetically "higher" sort. To the enlightened, liberal, and reflective mind such endings seem only comic, and afford merely the "lower" recreational pleasure that comedy, along with other sports and pastimes, gives.[39]

In dealing with the material suitable, in his judgment, for artistic treatment, Aristotle shows the same tendency. The goodness or badness of a work of art depends, to be sure, upon the goodness or badness of the subject portrayed, and his con-

37 *Cf. supra,* pp. 280–281.
38 *Cf. supra,* p. 200.
39 *Poet.,* 13, 1453*a,* 30 ff. *Cf.* Butcher, *op. cit.,* pp. 198 ff.

ception of what makes the subject suitable or unsuitable is undoubtedly clouded by irrelevant, moralistic considerations. Nevertheless, a purely aesthetic standard seems to be slowly coming to light. Both painting and poetry for example are said to be better or worse according as they represent men superior, equal, or inferior to humanity as it is.[40] This scale of measurement is in part moral, but not wholly so. When Aristotle speaks of inferior art as representing characters worse than ourselves, he would seem to have in mind—or at any rate, at the back of his mind—the caricaturing of men as they are. By "men worse than the average" he tells us he means "worse not as regards any and every sort of fault" but only as more ridiculous and more prone to cause laughter. Only when the deformity is so presented as to pain or harm others, does the treatment of it become bad art.[41] So, too, when he talks of artists who merely imitate the average, his meaning goes beyond the moral. He is apparently trying to differentiate an unselective, photographic realism from the distortion of the actual scene in the interests of the ridiculous and the amusing, on the one hand, and an "idealistic" rearrangement of it, to suit our more "serious" aesthetic taste, on the other.

Again, when we come to "idealistic" art, its advantage is not wholly ethical. The superiority of its material and of its manipulation is due to the presence of other factors, emotional and intellectual. Nay more, within the sphere of ethics, plain, homely virtue is not sufficient. Only the virtue that can also be made beautiful and striking is fit for the artist to work with. And unless his art succeeds in imparting interest and dramatic and aesthetic appeal to moral goodness, his art is not idealistic. If his "imitation" leaves righteousness as dull as it frequently is in reality, he is a mere photographer, a realist. For that matter, Aristotle goes so far as to hold that an ethically inferior subject, preserved in all its typical inferiority, may be ennobled by artistic treatment, as, for example, Achilles' undesirable traits were idealized by Homer unchanged.[42] Indeed, of subject matter distinctly objectionable from the moralistic,

40 *Poet.*, 2.
41 5, 1449*a*, 31 ff.
42 15, 1454*b*, 11 ff.

or even the religious point of view, he is perfectly tolerant, at any rate when it is imbedded in the "classics." The immoral stories told of the Gods and the heroes, over which Plato waxed so indignant and so censorious, "may," he says, "be as wrong as Xenophanes thinks, neither true nor the better thing to say; but they are certainly in accordance with opinion."[43] They are part of the body of accepted thought. It is this same wise, Aristotelian attitude that to-day permits an unexpurgated Bible to be sold openly in bookshops and to be sent everywhere by post.

All in all, then, in dealing with these three strata of material —humanity at its worst, its average, and its best—as in treating of the "higher" and "lower" subjective effects of art, Aristotle gives the impression of one attempting to work out an independent criterion of aesthetic values. He has begun at least to see that life as it ought and ought not to be for art is not necessarily life as it ought and ought not to be for morals. "Idealization" is not a moral but an artistic improvement upon the real. To present men as better than they are is essentially to present them as more interesting. To present them as worse is to present them as uglier and more ridiculous, but, for that very reason, as more amusing. And amusement, we remember, though not *the* good is a *good*, and an important and necessary factor in happiness.

It is true, of course, that Aristotle does not see his way any too clearly to this conclusion. He still insists, for example, that the artist must not depict moral evil unless it is indispensable to the effect of the composition as a whole. There is no possible excuse, he tells us, for introducing "depravity of character where it is not necessary and no use is made of it."[44] In any case it must be incidental and confined to the minor rôles.[45] That a study of viciousness for its own sake might have a profound dramatic and aesthetic value and justification Aristotle would not have allowed. *Splendida vitia* were beyond his dramatic ken. An evil protagonist, like Macbeth or Satan,

[43] *Poet.*, 25, 1460*b*, 36–1461*a*, 1.
[44] 25, 1461*b*, 19–21. *Cf.* 15, 1454*a*, 28–29.
[45] *Cf.* Ross, *op. cit.*, p. 279; Butcher, *op. cit.*, p. 227.

it has been pointed out, would have been incomprehensible to him.[46]

The reasons for this faltering on Aristotle's part are perhaps not far to seek. There are grounds enough for it in the encumbrance of the moralistic atmosphere and terminology by which his attempt to think and to express himself was hampered and confused. All Greek art was traditionally concerned with a divine and heroic subject matter, and poetry especially was so associated with religion and ethics, and so replete with examples and lessons, that it was difficult to develop new standards to which the didactic and moralizing elements were irrelevant.[47] But admitting to the fullest Aristotle's failure to disentangle art from moralistic considerations, and leaving to one side the possible reasons for his lack of success, it still remains true, as one critic remarks, that the *Poetics* "marks the beginning of the deliverance from two mistakes which have over and over again marred aesthetic theory—the tendency to confuse aesthetic with moral judgments and the tendency to think of art as duplicative or photographic of reality. There is clearly implicit in Aristotle's words the recognition of beauty as good independent of material and moral interests alike, but he has not succeeded in working his way to a definite statement of its nature."[48]

Even, however, if Aristotle had been able to work out his theory unhampered by moralistic influence, and had succeeded in setting aesthetics on its own feet, it is probably doubtful whether he would ever have granted the decree of absolute divorce between art and morality for which some modern students and practitioners of aesthetics have applied. For happiness, as we have seen, is a highly complicated thing interwoven of all human activities and satisfactions. Our interests do not ignore one another and develop in isolation, but are all pooled in a common, inclusive good. Although the immediate appeal of a situation may be to one side of human nature, its final seduction is of human nature as a whole, and by its rela-

[46] *Cf.* Ross, *op. cit., loc. cit.;* Butcher, *op. cit.,* p. 234.
[47] *Cf.* Butcher, *op. cit.,* ch. V, pp. 215 ff.
[48] Ross, *op. cit.,* p. 290.

tion, not to the part, but to the whole, its real value has to be judged. Our sensitiveness, then, to the aesthetic aspects of life, and our capacity for the pleasure that it is the business of the artist to arouse, are sharpened by all our interests, moral, intellectual, and physical, as well as by the specifically aesthetic. The pure specialist in art, responsive only to beauty, is no more fitted to be a judge of good art than is the pure specialist in morals, responsive only to the claims of righteousness, to be a judge of sound and enlightened ethical standards. In his distrust of the expert as one-sided and short-sighted Aristotle is explicit. It is not the shipwright, but the pilot who is the better judge of the rudder, not the cook, but the guest at the feast who is the better qualified to tell a good dinner from a bad one.[49]

This rejection of the expert as a competent judge may seem at first sight inconsistent with Aristotle's insistence that the difference between good and bad art is to be determined by aesthetic standards alone. But the inconsistency, if it exists, is not important. The higher court of appeal to which art may have to take its case is not any other single aspect of human nature, but the whole man, and the whole man sitting primarily not as a judge of the bearing of a work of art upon the problems of virtuous conduct, but as a judge of its aesthetic worth and its relation to beauty alone. To put it in terms of Aristotle's own metaphor, the pilot, who is better fitted than the shipwright to estimate the soundness of the rudder, is not just another carpenter, but the master of the entire ship; the guest, who knows better than the chef whether the dinner is good or not, is no fellow-cook or even a waiter at the table of life, but a *bon viveur* in the widest sense of the term. There is, then, in Aristotle's distrust of the pure aesthete as a competent judge of art no tendency to make the artist submit his work to the puritan for final approval. It is merely that an enlightened sense of beauty, like enlightened standards of right and wrong, must spring from a wider and better balanced idea of the good than the limited view of either the puritan or the aesthete can attain.

[49] *Politics*, III, 11, 1282*a*, 1–24.

In short, since the appeal of a work of art is to the whole man, the man who is to judge it must be whole. He must have more than the aesthetic window open upon the spectacle of existence. He must be an all-round individual, sensitive to all sides of life. But he must be more than that. After all, the common herd is not composed of aesthetes but of fairly all-round people. Yet no one would consider the general public a competent art critic. The final court of appeal is the educated man of the world who is not only open to all the influences of life, but by virtue of his education sees them all clearly and in proper focus. A person's taste in art is sound in proportion as he is cultivated, ripened, and mellow in all respects, including, of course, aesthetic sensitiveness. It is the pleasure taken, not by the vulgar herd, but by the "better public," the "free and educated" audience, as Aristotle calls it, that is the real test of good art as distinguished from bad.[50] But even on this point, we remember, Aristotle is liberal. It is better that the vulgar should have a vulgar art suited to their vulgar sense of beauty than that all art should be of so high an order as to pass over their heads and leave them without aesthetic satisfactions of any sort.[51]

So much for what we can venture concerning Aristotle's philosophy of art in general. Poetry, after all, is the subject of the *Poetics*, and to that we now return. The subject matter of poetry, Aristotle tells us, is human character and action considered in their universal aspects. Hence it is the most profound and the most inclusive of all the fine arts. Of all forms of poetry, again, tragedy is the finest. It possesses all the virtues of epic poetry and may indeed even appropriate its metre, and to these qualities it adds the embellishments of music and spectacle, which the epic lacks. Moreover, it is more compact, and more unified, and it is more concentrated in its effect.[52] An epic has "no fixed limit of time" to its narration, "whereas Tragedy endeavors to keep as far as pos-

[50] *Politics*, VIII, 7, 1342*a*, 18 ff. *Poet.*, 26, 1461*b*, 20 ff. Butcher, *op. cit.*, pp. 211, 226.

[51] *Politics, loc. cit.*

[52] *Poet.*, 4, 1449*a*, 1 ff., 5, 1449*b*, 9 ff., 26, 1461*b*, 26 ff.

sible within a single circuit of the sun, or something near that." [53]

Tragedy may be defined "as the imitation of an action that is serious and also, as having magnitude, complete in itself; in language with pleasurable accessories (such as song and dance) each one brought in separately (in verse only or in song) in the parts of the work; in a dramatic, not in a narrative form; with incidents arousing pity and fear, wherewith to accomplish its catharsis of such emotions." This famous definition of tragedy has been the subject of endless interpretation and controversy. The particular storm-centres are two. The first lies in the phrase "complete in itself," which, taken in connection with the limitation "to a single circuit of the sun," has given rise to the doctrine of the three dramatic unities of action, time, and place; the second, in the last sentence which gives as the aim and justification of tragedy the arousing and the "catharsis" of the emotions of pity and terror.

The question of the three unities has perhaps become to-day somewhat academic, though it was alive and burning with the French and Italian tragedians of the Sixteenth and Seventeenth Centuries, and gave rise at that time to a rule of dramatic construction which was rigidly adhered to, particularly by the French. Indeed, some of the severest Continental criticsm of Shakespeare was directed against his failure to observe the unities of time and place. But the infelicities that resulted from trying, as the French did, to confine the enactment of any and every plot to a single spot and a single round of the clock, were such as to rob this criticism of its sting, and, for that matter, to suggest that Aristotle himself could never have held the doctrine. This suggestion is borne out by the text of the *Poetics*, in which, so modern critics say, we find only an insistence on unity of action or plot. The unity of time and of the "single circuit of the sun"—which means that the action of a tragedy should be completed within the span of a day—was, we are told, merely a statement of usual but by no means invariable Greek practice. It was a kind of counsel of perfection, or at least a warning that the time consumed in the action

[53] *Poet.*, 5, 1449*b*, 9 ff.

should never be dragged out, and should always contribute to the general effect of wholeness and compactness of plot. As for the unity of place, or the rule that the whole action must take place on the same spot, this, too, was a general though not invariable theatrical convention among the Greeks. But there is no mention of it by Aristotle himself, and it would seem to have been read into him by later critics as a corollary of the unity of time. All in all, the unities of time and place were probably comparatively minor matters in Aristotle's eyes, and, instead of being regarded as absolute, they were to be applied only to the extent and in the manner required by the all-dominating unity of action.[54]

What, then, are the formal requisites for unity of action, or, in other words, for a good plot? Obviously a well-constructed story "cannot either begin or end at any point one likes." The beginning must be "a fresh start," and "not itself necessarily after anything else," but it must also be such as to need "something else after it" or, in other words, as to require further developments. These developments must depend upon the beginning, and also remain inconclusive in themselves. Finally, the end must be such as to appear the natural consequence of all that has gone before, and at the same time to entail no further results. In short, a good plot must tell all of a story that is whole and complete in itself.

The limits set upon its length are not those of the time required for the performance of the play in question. Concessions to the clock do "not fall within the theory of poetry." The only natural limit upon the magnitude of the plot is the power of the memory to take it in and to present it as a whole. Within this limit "the longer the story, consistently with its being comprehensible as a whole, the finer it is by reason of its magnitude."

Again a unified plot has to be selective. One hero does not make one story, nor is tragedy biography, however tragic. But of the mass of events, an infinity of them disconnected, that go to make up a man's life, only those must be chosen that can be threaded together so as to form a complete whole "with its

[54] *Cf.* Butcher, *op. cit.*, ch. VII, pp. 277 ff.

several incidents so closely connected that the transposal or withdrawal of any one of them will disjoin and dislocate the whole."[55] Nothing could be worse than a mere sequence of episodes that do not follow either necessarily or probably from one another.[56]

Since tragedy is not biography, the poet need not stick to fact or even to the accredited form of the legend from which he draws his story. He is welcome to change and to invent, so long as his plot remains coherent and within the bounds of possibility. Possibility, however, is to be understood, not in the merely negative sense of what is not actually impossible, but as a positive display of necessity or probability in the working out of the action. The reason that most tragedians delve into the past and found their plots upon what is supposed to have really happened—as, for example, the events recorded by Homer—is that such events carry with them more conviction of possibility than the untested fancies of the poet as to what might happen. "Nevertheless, even in tragedy, there are some plays with but one or two known names in them, the rest being inventions; and there are some without a single known name . . . in which both incidents and names are of the poet's invention; and it is no less delightful on that account. So that one must not aim at a rigid adherence to the stories on which traditions are based."[57] That Aristotle should take the trouble to point this out may seem strange to us, steeped as we are in a literature so great a part of which is frankly fiction. But we should remember that the Greek convention was to turn to history or traditional myth for one's material—just as if it were the orthodox thing for our modern novelists to write only historical novels. In such circumstances a progressive and enlightened literary critic to-day might feel it incumbent upon him to urge writers to shake off this convention, strike out for themselves, and invent their own stories, if they had the inspiration and the ability to do so.

Finally a well-constructed tragic plot should contain factors of surprise and of coincidence so extraordinary that they

[55] *Poet.*, 8, 1451*a*, 30 ff.
[56] 1451*b*, 33 ff.
[57] 9, 1451*a*, 37–1451*b*, 26.

look like the hand of God. The pity and terror which it is the business of tragedy to evoke are most easily aroused by incidents that "occur unexpectedly and at the same time in consequence of one another; there is more of the marvellous in them than if they happened of themselves or by mere chance. Even matters of chance seem most marvellous if there is an appearance of design as it were in them; as for instance the statue of Milys at Argos killed the author of Milys' death by falling down on him when a looker-on at a public spectacle; for incidents like that we think to be not without a meaning. A Plot, therefore, of this sort is necessarily finer than others." [58]

We pass now to the other great bone of contention—the question of the pity and terror that a tragedy must arouse and of the "catharsis" of these emotions which it must effect, if it is to be truly and distinctly tragic. Some commentators have suggested that the stirring of one of these feelings was sufficient in Aristotle's eyes to produce the sense of tragedy. But he would seem to insist upon the linking of the two emotions, at any rate if the full and highest tragic impression is to be secured.[59] If so, the reason is not far to seek. Pity without accompanying or preceding fear, like terror without consequent compassion, does not of itself sufficiently involve the spectator in the situation. Either emotion in isolation leaves him in a sense detached and an outsider.[60] To be struck with a sense of utter tragedy he must find some personal application in the calamity. He may, indeed, feel reasonably sure that the story and the fate of the tragic hero will not be his, but they must awaken him to the uncertain future that hangs over even the happiest present, and must rouse within him vague forebodings of what may be waiting in his path. He must be forced to cry, "There, or, if not there, by some other *via dolorosa*, but for the grace of God, go I." [61]

It is true that the terror he actually experiences is not primarily for himself, as some critics have maintained, but for the tragic hero about whom he sees the coils of destiny slowly tight-

[58] *Poet.*, 9, 1452*a*, 1–10.
[59] Butcher, *op. cit.*, pp. 263 ff.
[60] Butcher, *op. cit.*, *loc. cit.*
[61] *Cf.* Ross, *op. cit.*, pp. 282–283.

ening.[62] Otherwise he would find no pleasure in the spectacle but merely panic. Still, the sight of sufferings from which he was sure he was immune, or which did not suggest his own susceptibility to calamity of some sort, would, by its inability to arouse a secondary fear for himself, fail to produce the complete and essential tragic impression; just as looking on at the agonies of a disease from which he knew that he was already, or was like to be, the victim would evoke a selfish, pitiless fear equally destructive of the full tragic effect. Side by side with the fact that he may be involved must stand the fact that he is not as yet and will not necessarily be caught in the toils. Taken together the two facts arouse both pity and fear; but a fear not so great or so personal as to preclude sympathy, and a pity from which a feeling of personal danger and of consequent solidarity with the tragic hero cannot altogether be divorced.[63]

But what does Aristotle mean by the term "catharsis," or "purgation"? In what does the purging of terror and pity consist? About this point there has been an enormous amount of discussion and division of opinion.[64] One school of interpretation with a long history behind it has derived the metaphor from the ceremonial rite of religious purification or "lustration," and has regarded the catharsis as essentially a moral process of refining the emotions in question. As to the nature of this "moralizing," various suggestions have been made, such as ennobling pity and fear, raising them to the sublime, rendering them disinterested and unselfish, converting them into virtuous habits of mind, and the like.[65] But all are agreed that the aim of tragedy, according to Aristotle, was to leave the spectator in a morally chastened condition of some sort.

This interpretation, however, is now for the most part discarded, and the metaphor is regarded as medical in origin, and the nature of the catharsis as purely psychological and aes-

62 *Cf.* Bywater, *op. cit.*, pp. 210 ff., note on 1452*b*, 32; Ross, *op. cit., loc. cit.*

63 *Cf.* Ross, *op. cit., loc. cit.;* Bywater, *op. cit., loc. cit.*

64 *Cf.* Bywater, *op. cit.*, pp. 152 ff., note on 1449*b*, 27; Butcher, *op. cit.*, pp. 243 ff.

65 *Cf.* Bywater, *op. cit., loc. cit.*

thetic. By purgation, we are told, Aristotle means here, as elsewhere, merely the removal, attended with pleasurable relief, of a disturbing element or product which, if it were not expelled, would cause harm. Moreover, even if the text would bear an ethical twist, the moral interpretation is incompatible with Aristotle's obvious view that it is not the business of the theatre to be a school of morality, or of the poet to be a teacher of ethics. Nor could the tragedian or the theatre be successful at such a business, even if it were theirs, since the general public did not go to the theatre often enough for its morals to be either permanently harmed or benefited by what it saw.[66] Of this fact, which our modern censors of the stage in the interests of morality sometimes forget, Aristotle was quite well aware.

The truth is, the argument continues, Aristotle was attacking the Platonic theory that grief is an unmixed evil detrimental to the operation of reason and self-control, and that therefore all artistic representations tending to arouse it, be they musical, poetic, or dramatic, must be suppressed. He was showing that on the contrary such representations might purge pity and fear of their disquieting and painful features, and by relieving them of their burden might even make them positive sources of harmless aesthetic pleasure and thus objects of enjoyment and elements in happiness, and, as such, goods. Their use in these circumstances would naturally be occasional and their effect would be temporary, like that of a physical purge. Plutarch, it is pointed out, noted the somewhat similar cathartic effect of a wake which by exciting the mourners' sorrow helps to work off and allay their grief. Such purely purgative and therapeutic results—without any reference to the moralities—of music and dancing and other psychological excitants were remarked by other later classical writers. That Aristotle claimed no more than this for tragedy was in modern times first advanced during the Renaissance. And since the middle of the last century the suggestion has been accepted by most Aristotelian scholars. We are not justified, then, in going beyond the sphere of aesthetics and trespassing upon that of morals in describing the process or the results of purgation.[67]

[66] *Cf.* Bywater, *op. cit., loc. cit.*

[67] *Cf.* Butcher, *op. cit.*, p. 269

But why and how does seeing a tragic drama performed at the theatre evacuate pity and terror of their painful elements and turn them into pleasurable emotions? Why should a spectacle whose avowed intent is to arouse the feelings in question also prove to be a cure for them? In what manner does this homeopathic remedy accomplish the relief? The answer would seem to be as follows. Aristotle feels that pity and fear are essentially varieties of pain, and therefore in their native state evil things.[68] Moreover, they are evils to which most human beings are continually subjected in their daily life. Nearly all men must live under a strain of constant anxiety for themselves, and experience an unremitting drain upon their natural sympathy for others. At the same time, we ought to suffer moderately from these disturbing emotions, for we should be inhuman if we did not do so. In the *Ethics* we are told that "to fear some things is even right and noble, and it is base not to fear them,"[69] and presumably we ought also to feel the pain at the sight "of an evident evil of a destructive or painful kind in the case of somebody who does not deserve it," in which, when the evil is "one which we might expect to happen to ourselves or some one of our friends," pity consists.[70]

Still ethics is not aesthetics, and whatever causes pain is aesthetically bad. Therefore a tragedy which gave us no respite from the anxiety about ourselves and the unhappiness over others that, morally speaking, we ought to feel would be bad art, however salutary its chastening influence might be from the purely ethical point of view. The bitterness, then, must be removed from pity and terror before they can be considered aesthetically good. But this does not mean that the emotions themselves should be removed. The object of tragedy is not to make us temporarily reckless and callous. It is to *arouse* horror and compassion at the same time that it somehow alters pleasurably their relation to ourselves. Involved in this function of transvaluation there is also a further process of moderating these emotions to a mean degree. They are cumulative

[68] Cf. Rhet., II, 5, 1382*b*, 21 ff. Butcher, *op. cit.*, pp. 255 ff.
[69] *Eth. Nic.*, III, 6, 1125*a*, 12.
[70] *Rhet.*, II, 8, 1385*b*, 13 ff.

poisons which, unless they are washed out at intervals by special treatment, remain unexcreted and accumulate far in excess of what we ought to feel. We tend to become over-anxious and over-apprehensive about ourselves, and too lush and sentimental in our pity for the woes of our neighbors. We exaggerate both the insecurity of our own lives and the injustice of our friends' misfortunes. As a preliminary, then, to making pleasurable what is ordinarily painful, tragedy must first reduce the excess of anxiety and compassion to the normal amount.

Now, when we assist at the performance of a tragedy we get, to be sure, an extra dose of pity and fear. But it is of a different and milder sort. The terror and compassion aroused are not for real people like ourselves and our fellows, but for nonexistent and, it may be, entirely fictitious persons. Our emotions are thus transferred from ourselves to objects and situations in which we are not immediately concerned. We "take it out" on something else, just as we can work off a fit of anger pounding a pillow instead of the person who has enraged us. Moreover, since the objects and situations are presented with grandeur and in the light of the universal and the eternal, we are lifted out of ourselves in their presence. We tend to forget all that is petty and particular in our own woes, and our feelings are for the moment depersonalized. We have shifted our burden to the tragic hero and made him the scapegoat of our sorrows. Thus, not only is the excess of accumulated pity and terror discharged with a sense of pleasurable relief, but the normal amount, which we should ordinarily feel in a painful manner for ourselves and our friends, is replaced by fear and compassion at a situation that threatens us with no direct personal dangers, but at the same time seeks to remind us that, like every other human being, in the midst of life we are in death.

Here again, the pleasure we take in being reminded of this universal but tragic truth is perhaps one of relief and of having shifted the danger from the realm of fact to that of fiction and thus lifted it for the moment from ourselves. However that may be, there is no doubt that we like weeping at the death of the tragic hero, whereas we dislike weeping at the

funeral of a friend; though the tears are as salty and the sobs as heart-rending in the one case as in the other. Upon this dual capacity of fear and pity to be a pleasure, when felt for a fictitious or unrelated object, and a pain, when felt for one in which we are immediately concerned, depends the power of the tragic drama to remove their excess and transmute their value while preserving their substance intact.[71]

It has been pointed out that the emphasis Aristotle places upon the purging away of excess emotions is perhaps one-sided and misplaced. To-day at any rate, people do not suffer so much from too great an amount of fear and compassion as from a deficiency in these feelings. From this point of view the action of tragedy would be rather tonic than cathartic, and would consist in stimulating the emotions in question and in making the ordinarily careless and insensible spectator sensitive for the moment to new reaches of experience.[72] At the same time, since he would not be personally threatened by what he saw, the transvaluation of the feelings would also occur, and pity and terror would be aroused in their pleasurable form. Hence the indifferent person, also, would like to have these emotions excited, and would derive an aesthetic enjoyment from their stimulation.

Again, it should perhaps be said, the excitement of the tragic sense has, besides its direct result of aesthetic pleasure, certain moral by-products. Certainly we are not demoralized in any way by the tragic spectacle. The pity and the fear that we feel for the hero are no less humane because we enjoy them. Indeed, if anything, they are accompanied by a state of mind more exalted than that in which they give pain. Terror and compassion are all the nobler, morally, for being purged of the disagreeable, personal element and turned into sources of aesthetic delight. From their temporary association with the universal they gain in breadth and insight, in tenderness and courage. We leave the theatre on a level of life morally as well as aesthetically higher than that on which we entered it,

71 For a discussion of the nature of "catharsis," *cf.* Butcher, *op. cit.*, ch. VI, pp. 240 ff.; Ross, *op. cit.*, pp. 284–285.

72 *Cf.* Ross, *op. cit., loc. cit.*

and it takes a minute for us to get down to earth again. To be sure, as we have already said, it is not the business of the drama to produce this effect. It is the function of tragedy simply to remove the disquiet from pity and terror and to substitute aesthetic pleasure in its place. The tragedian can depart in peace if he has succeeded in making the horrible and the pitiful a thing of beauty. That the aesthetic enjoyment he induces of what is ordinarily painful happens to be also a frame of mind which the moralist would rate more highly is accidental so far as he is concerned. For him to regard the alliance as essential would turn him from an artist into a preacher.[73]

There is also another thing that we should not forget. Though the goal of tragedy is the purely aesthetic one of making pleasurable a situation ordinarily painful, it cannot attain that goal unless it employs material of moral import. The rights and wrongs of the matter must not, indeed, be too evident, but a moral problem must nevertheless be presented. Nor can the misfortunes suffered by the hero be pure mischance. They must be in some way connected with the ethics of the case. Neither the execution of a criminal nor the fortuitous destruction of an innocent person gives tragic pleasure. The one is not a misfortune in the spectator's eyes; he finds no ethical problem involved, and his pleasure is merely moral satisfaction at seeing justice done. The other is so senseless and so unjust as to be simply odious. Even that apparent exception, Antigone, could not have been made a truly tragic heroine unless her obedience to the higher duty of giving burial to her brother, dictated by every humane and pious consideration, had brought her into conflict with a royal prohibition which, however tyrannical, unjust, and outrageous it might be, still possessed the force of law. At the same time, as we shall see in a moment, it is a question whether Aristotle's theory of tragedy is really broad enough to include a case like hers.

This point is brought out in the discussion to which we now turn, of the kind of man suitable for a tragic hero and the kind of fall he must experience if pity and terror are to be aroused and pleasurably relieved. After pointing out that he must be a

[73] *Cf.* Butcher, *op. cit.*, p. 269.

person of eminence, since the spectacle of an obscure *bon bourgeois* falling upon evil days is not sufficiently striking to impart the full tragic effect, Aristotle takes up the moralities of the situation. The hero must not be too good, nor yet too wicked, since, as we have just noted, the spectacle of extreme virtue or extreme vice undergoing great calamity, or that of the wicked prospering, fails to produce tragic fear and compassion. As the only suitable candidate, "there remains then the intermediate kind of personage, a man not pre-eminently virtuous and just." Such a man will not be so good that his misfortunes will appear wholly undeserved. At the same time, he will be sufficiently virtuous for his misfortunes to appear "brought upon him not by vice or depravity, but by some error of judgment."[74]

Just how much we are to understand by such error is an open question. Strictly speaking, it should mean merely error that arises from a lack of knowledge of circumstances that might have been known, or, in other words, from carelessness to some extent reprehensible. But it is also used by Aristotle to cover acts intentionally, but not deliberately, committed under the influence of passion. Finally, it may also mean persistent weakness of character which is more than sporadic fault and yet not actual viciousness. All three meanings, it has been pointed out, would seem to be present in Aristotle's conception of the cause of the fall of Oedipus in the *Oedipus Tyrannus*, which seems to have been his favorite play. Error thus interpreted and, for that matter, even if it were limited to a blindness beyond the control of the individual, would, we are told, allow both for the collision between man and fate and the inner division of a man against himself from which the tragic situation springs. But in its widest extension, despite the efforts of some critics to stretch it, it fails to motivate, as Aristotle's theory in general fails to color, the tragic situations based both upon the sufferings of a blameless character, not for his own sins, but for those of the world, and upon the arraying of a supremely evil will against the good.[75] Thus, as we have already

[74] *Poet.*, 13, 1452*b*, 28 ff.; Butcher, *op. cit.*, ch. VIII, pp. 302 ff.; Bywater, *op. cit.*, pp. 210 ff., comment on 1452*b*, 32.

[75] *Cf.* Butcher, *op. cit.*, pp. 321 ff.

had occasion to note, it would be difficult if not impossible to square Macbeth with the necessities imposed by Aristotle upon the tragic hero, and quite out of the question to bring Richard III or the Satan of *Paradise Lost* into conformity with them.[76] For that matter, though for the opposite reason, the Shakespearean Cordelia, or even Antigone, as Sophocles treats her, would seem to be disqualified by virtue of their flawless characters.[77] All in all, then, the Aristotelian specifications have proved too rigid, at any rate for more modern developments of the tragic drama.[78]

We leave now the essential character of the ideal tragic hero, and pass to another question. How, we must ask, is his downfall to be accomplished if the full tragic effect is to be gained? How is his passage from happiness to misery to be manipulated? In other words, how are we to arrange the plot and depict its interaction with his character? In the first place, Aristotle replies, the character we attribute to our hero and the speeches we put into his mouth must embody the moral qualities and the thoughts that naturally lead to the admixture of good and evil fortune in his life. At the same time, since the important thing "is the combination of the incidents of the story," we must take care that the action does not seem to take place merely to illustrate the hero's character and ideas. On the contrary, the depiction of character should be merely accessory to the working out of the plot, which is "the first essential, the life and soul, so to speak, of Tragedy." Still, although the action is paramount and the delineation of character subsidiary, the action must be true to the nature described; "so that whenever such-and-such a personage says or does such-and-such a thing, it shall be the necessary or probable outcome of his character," just as in the development of the action itself "whenever this incident follows on that, it shall be either the necessary or the probable consequence of it." In short, the playwright is confronted with a problem of double causa-

[76] *Cf.* Butcher, *op. cit., loc. cit.;* also pp. 314–315; Ross, *op. cit.,* pp. 279, 288.

[77] *Cf.* Butcher, *op. cit.,* pp. 309–310.

[78] *Cf.* Butcher, *op. cit.,* p. 333.

tion. Speeches and incidents must be the necessary or probable outcome both of preceding lines and situations and of the general psychology of the personage who figures in them. This psychology furthermore must be consistent with itself, even if that consistency lies in persistent inconsistency of word and deed; it must be like reality; and it must be appropriate to the sex, station, etc., of the person in question. Finally, and this is the most important point of all, it must be actuated by a moral purpose, and by one that is on the whole good and noble.[79]

Again, the diction, or composition of the verses in which the characters express their thoughts, is, along with the music, an important element in aesthetic pleasure. But the subordination of these factors to the telling of the story is obvious. Then, too, the play must be so mounted and staged as to contribute to the tragic effect, though this is "the least artistic of all the parts, and has least to do with the act of poetry. The tragic effect is quite possible without a public performance and actors; and besides the getting-up of the spectacle is more a matter for the costumer than the poet."[80]

Returning now to the manipulation of the story proper, we find that generally speaking plots are of two sorts. First, the story may be developed in a placid, continuous manner unbroken by startling events. Under these conditions the tragic hero would merely go into a sort of decline of moral character and resultant fortune that would lead gradually to his final and complete undoing. A tale so told would not be interesting. Aristotle would probably argue that it would administer pity and terror in such slightly increasing doses that we should build up an immunity to these emotions as the play progressed and receive the final and presumably lethal inoculation with no great disturbance. At any rate, as we have already seen, the incidents arousing pity and terror "have the very greatest effect upon the mind when they occur unexpectedly, and at the same time in consequence of one another." In short, the plot

[79] *Poet.*, 15, 1454*a*, 16 ff.

[80] 6, 1449*b*, 31 ff. *Cf.* 14, 1453*b*, 1 ff.; Butcher, *op. cit.*, ch. IX, pp. 334 ff.; Ross, *op. cit.*, pp. 285–286.

should not be simple, but complex. The reversal of fortune should be sudden and unlooked for, and it is even more impressive if it is accompanied by a "discovery," as Aristotle calls it, or an abrupt "change from ignorance to knowledge, and thus to either love or hate, in the personages marked for good or evil fortune." The skilful combination of these two factors of discovery and "peripety," to use the technical Greek term for sudden reversal, marks the height of the tragedian's art.[81] For instance, the overwhelming effect of the *Oedipus Tyrannus* lies in the simultaneity of the king's downfall with his discovery that he has unwittingly killed his father and married his mother. Or again, to choose a somewhat different example, the tragic suitability of the story of Orestes and Iphigenia lies in the hero's being snatched from death at his sister's hands by her sudden recognition of her brother at the very moment that, in her rôle as priestess of Artemis, she is about to offer him as a human sacrifice upon the altar of the goddess. It is by such tremendous doses of pity and fear, administered upon an empty stomach, as it were, to an unprepared system, that the necessary catharsis of these emotions is brought about. A useful adjunct is the depiction upon the stage of the hero's sufferings, such as his murder, or the tortures he undergoes.[82]

Various artifices may be used to make the discovery startling. It may be connected with a "sign" like a birthmark or the scar of Odysseus, or occur from an awakened memory, a train of reasoning, or a logical slip on the part of the character concerned. The worst sort of sign is that lugged in by the poet; the best is "that arising from the incidents themselves, when the great surprise comes through a probable incident."[83]

Again, the tragic story loses in force when the chief actors in it are hostile or indifferent to each other. "Whenever the tragic deed, however, is done within the family—when murder or the like is done or meditated by brother on brother, by son on father, by mother on son, or son on mother—these are the situations the poet should seek after." Traditional stories of this sort, like the murder of Clytemnestra by Orestes, should

[81] *Poet.*, 10, 1452*a*, 12 ff.
[82] 11, 1452*b*, 9 ff.
[83] 16, 1454*b*, 19 ff.

be kept as they are. Still, the poet must "devise the right way of treating them." The tragic deed may be committed either "knowingly and consciously," like Medea's murder of her children, or in ignorance of the relationship, with subsequent discovery, like the deed of Oedipus. "A third possibility is for one meditating some deadly injury to another, in ignorance of his relationship, to make the discovery in time to draw back."

"The worst situation is when the personage is with full knowledge on the point of doing the deed and leaves it undone. It is odious and also, through the absence of suffering, untragic. . . . Next after this comes the actual perpetration of the deed meditated. A better situation than that, however, is for the deed to be done in ignorance, and the relationship discovered afterwards, since there is nothing odious in it, and the discovery will serve to astound us." But it is best of all to have the relationship recognized just in time to prevent the commission of the act.[84]

Having chosen a plot that allows of sudden reversal and discovery, "the poet should remember to put the actual scenes as far as possible before his eyes. In this way, seeing everything with the vividness of an eye-witness, as it were, he will devise what is appropriate, and be least likely to overlook incongruities. . . . As far as may be, too, the poet should even act his story with the very gestures of his personages. Given the same natural qualifications, he who feels the emotions to be described will be the most convincing. . . . Hence it is that poetry demands a man with a special gift for it, or else one with a touch of madness in him; the former can easily assume the required mood, and the latter may be actually beside himself with emotion. His story, again, whether already made or of his own making, he should first simplify and reduce to a universal form, before proceeding to lengthen it out by the insertion of episodes. . . . This done, the next thing, after the proper names have been fixed as a basis for the story, is to work in episodes or accessory incidents," taking care that they are appropriate and short. Equal attention should be given to the part of the play consisting of the complication of events leading up to the

[84] *Poet.*, 14, 1453*b*, 11 ff.

dénouement, and to the dénouement itself. Some dramatists are good at working up to a crisis, but poor at managing the climax in a telling manner. The dénouement "should arise out of the plot itself, and not depend on a stage-artifice." "It is necessary for both points of construction (the complication and the dénouement) to be duly mastered."[85]

Moreover, the poet will find that he has a choice of emphasis. He may rely primarily upon the complex plot of sudden reversal and discovery, or upon the depiction of suffering, or upon the study of character, or upon the awesomeness of the spectacle. But the contemporary poet at any rate will aim at combining "every element of interest, if possible, or else the more important and major part of them. This is now especially necessary owing to the unfair criticism to which the poet is subjected in these days. Just because there have been poets before him strong in the several species of tragedy, the critics now expect the one man to surpass that which was the strong point of each one of his predecessors."[86]

Two warnings remain to be given the would-be playwright. He must remember in the first place to be brief and to the point, and not to pad his plot. He is not an epic but a tragic poet, and he should not try to "write a tragedy on an epic body of incident (i.e. one with a plurality of stories in it) by attempting to dramatize the entire story of the Iliad. In the epic, owing to its scale every part is treated at proper length; with a drama, however, on the same story the result is very disappointing," as is attested by the poor success or flat failure of all who have attempted it. Second and last, "the chorus should be regarded as one of the actors; it should be an integral part of the whole and take a share in the action." The habit, in vogue in Aristotle's day, of introducing into a play songs that have nothing to do with its plot, and that would be equally at home in any other drama, cannot be too strongly reprehended. There is no real difference between inserting songs of that sort into a tragedy and transferring speeches or even whole acts from one play to another.[87]

[85] *Poet.*, 17.
[86] 17–18, 1456*a*, 10.
[87] 18, 1456*a*, 11 ff.

Aristotle brings his discussion of tragedy to a close by pointing out briefly the best way of manipulating words in point of syntax, sound, composition, and the like, to produce a poetic effect. "The perfection of diction is for it to be at once clear and not mean." To kill these two birds with one stone is the poet's problem. In attaining his end, he may use strange, or metaphorical, or ornamental words, and he may coin, lengthen, abbreviate, or alter them as the case requires. But his use of them must be sparing and to the point. Sentences composed of metaphors are nothing but riddles, of strange words, nothing but barbarisms. "What helps most to render diction at once clear and non-prosaic is the use of the lengthened, curtailed, and altered form of words. Their deviation from the ordinary words will, by making the language unlike that in general use, give it a non-prosaic appearance; and their having much in common with the words in general use will give it the quality of clearness." Their superiority is easily recognized if we take a line of poetry and substitute for them the words in ordinary use. But care should be taken not to use them improperly and with ludicrous effect. Here, as everywhere, in the poetic vocabulary the rule of moderation should be employed. "It is a great thing, indeed, to make a proper use of these poetical forms, as also of compounds and strange words. But the greatest thing by far is to be a master of metaphor. It is the one thing that cannot be learnt from others; and it is also a sign of genius, since a good metaphor implies an intuitive perception of the similarity in dissimilars."[88]

We now turn for a moment to epic poetry. A good epic, like a good tragedy, should tell a single story and be an organic whole "so as to enable the work to produce its own proper measure with all the organic unity of a living creature." Herein it differs from history, which "has to deal not with one action but with one period and all that happened in it to one or more persons, however disconnected the several events may have been." Again, a good epic, like the drama, must be either simple or complex, a story of character or of suffering, with "Peripeties, discoveries, and scenes of suffering, just like trag-

[88] *Poet.*, 20–21.

edy." It will differ from tragedy in the two minor points of not being adapted to the stage and of lacking musical interlude, and in the two major respects of length and kind of metre employed.

Again, both the epic and the tragedy may be criticized on much the same grounds. Apart from errors of technical knowledge, which after all are not artistic faults strictly speaking, the two forms of poetry are generally open to the same reprimands. The standard complaints of the critics are that the poet, whether epic or tragic, contradicts himself, that he corrupts morals, or that he is lacking in technical correctness. Such criticisms should not be made lightly or inadvisedly. So far as impossibility is concerned, it should be remembered that much depends upon the effect. If the poet can make his audience swallow the impossibility without straining at it, and can give an added poetic effect by its use, he is justified in employing it; otherwise not. A case in point is the pursuit of Hector as related in the *Iliad*—an impossibility, if you like, when carefully analyzed, but none the less telling from the literary point of view for all that. In any case "for the purposes of poetry a convincing impossibility is preferable to an unconvincing possibility," particularly if it improves upon reality artistically and makes the subject more interesting. So, too, with the improbable. Before attacking it, the critic should ask himself whether the episode may not once have actually been probable, or at least whether it is not so imbedded in accepted popular tradition that its improbability is overlooked. A modern critic, for example, who fulminated against Schiller's *Wilhelm Tell* on this score would lay himself open to both replies.

As far as immorality is concerned, before we accuse a poet of it we should do well to "consider not only the intrinsic quality of the actual word or deed, but also the person who says or does it, the person to whom he says or does it, the time, the means, and the motive of the agent—whether he does it to attain a greater good, or to avoid a greater evil." Here is another bit of Aristotelian common sense which might well be pondered by those modern censors who, instead of judging a work of art as a whole, nose out isolated words or passages that they con-

sider objectionable and adduce them as reasons for suppression of the book or play in question.

The charge that the poet is self-contradictory may be countered by an indictment of the critic for carelessness or for misunderstanding the author's real meaning. In the same way, criticisms of language must not overlook possible double meanings on the part of the poet, or metaphors, or catches in grammatical construction, or differences in punctuation, or employment of technically vague and inappropriate terms to which popular usage has given a definite meaning. Frequently, then, the problems gravely propounded by the over-hasty reviewer have their solutions.[89]

In some respects the epic has the advantage of tragedy. Its length and its freedom from the mechanical restrictions of the stage "make it possible for one to describe a number of simultaneous incidents," whereas in a play "one is limited to the part on the stage and connected with the actors." This is "a gain to the epic, tending to give it grandeur, and also variety of interest and room for episodes of diverse kinds." The great trouble with tragedy is that it is apt to bore the audience with too great uniformity of incident. Again, the sense of the marvellous, so necessary to tragedy, is more easily aroused by the epic, which "affords more opening for the improbable, the chief factor in the marvellous, because in it the agents are not visibly before one." One can describe most impressively an event that would be ludicrous if actually seen. Thus "the scene of the pursuit of Hector would have been ridiculous on the stage—the Greeks halting instead of pursuing him, and Achilles shaking his head to stop them; but in the poem the absurdity is overlooked." [90]

Finally, the epic has at its disposal the heroic metre, which is "the gravest and weightiest of metres," and therefore, "more tolerant than the rest of strange words and metaphors." Hence in this respect "the narrative form of poetry goes beyond all others." To write an epic in any other metre would be absurd, and it would be still more so to try a medley of metres, as one poet did. So it is that "no one has ever written

[89] *Poet.*, 25. [90] 24, 1459*b*, 17 ff.

a long story in any but heroic verse; nature herself teaches us to select the metre appropriate to such a story";[91] just as she has indicated the iambic, in which we instinctively tend to converse, as the most suitable for the actor's lines.[92]

Still, and here the *Poetics* comes to an end on the same note as that on which it opened, tragedy is the finer form of poetry, when all is said and done. That reading is a more cultivated pastime than theatre-going is nothing against the tragic art. Tragedy may not only be seen on the stage; it may be read like the epic, and the mere fact of staging it does not lower it. The music and spectacle, indeed, add to its value. It is, as we long ago noted, more unified and more concentrated. In spite of certain superiorities on the part of the epic, it has almost everything of importance that the epic possesses and much besides. It is clear, then, that, "as attaining the poetic effect better than the epic, it will be the higher form of art."[93]

[91] *Poet.*, 25.
[92] 4, 1449*a*, 24 ff.
[93] *Poet.*, 26.

## CHAPTER XII

## REVIEW

We have now to pause a moment and review as a whole the ground we have traversed. We saw that Aristotle started his philosophical career as a fairly faithful Platonist. From what we know of earlier works like the *Eudemus*, or *On the Soul*, the *Protrepticus*, and possibly the earlier portions of the *Politics*, written while he was still a student at the Academy, we concluded that at that time he accepted without question the Platonic views on immortality with their attendant belief in preexistence, transmigration, and recollection; considered ethics and even politics to be absolute sciences concerned with the nature of an unchanging, rigidly definable good, both moral and social; and also probably assented to the doctrine of the Ideas. However, scientist, naturalist, and realist that he was at heart, we found him, very soon after the death of Plato and while he was living at Assos and Mytilene, criticizing and rejecting in his dialogue *On Philosophy* and in the earlier portions of the *Metaphysics* Plato's views on the Ideas, and, in the *Eudemian Ethics* and the later portions of the *Politics*, moving away from the concept of an absolute good and an absolute ideal state towards a relativistic and naturalistic attitude. Plato's teaching that the universe was created had also been replaced by the characteristic Aristotelian insistence that it was uncreated and essentially the same from everlasting to everlasting. Nevertheless, Aristotle's outlook was still religious, and the loss of the Ideas had been compensated by the rather vague but morally oriented concept of a God who, though not the cause of the world's existence, was the explanation of its orderly character and the source of its motion.

By this time, Aristotle had two major metaphysical problems on his hands. In rejecting the Ideas he could not, of

course, deny the real existence of the formal aspect of the universe. The laws, types, classes, values, and the like which it exhibited were no less part and parcel of it than the sensible material in which they appeared. Plato had, in Aristotle's opinion, divorced the two beyond hope of reconciliation or of establishing any working relation between them. It was the Aristotelian task to find some formula that would reunite them. This was accomplished by the doctrine that *the individual, the concrete, alone had enacted existence.* Form without Matter, Matter without Form, was never found in the universe. The world was a collection of particular objects in which the two were always united.

To explain the nature of this union Aristotle developed the doctrine of the Actual and the Potential. Every particular object was double-faced. It looked both backward and forward; backward to other objects in which it discovered and realized latent capacities, forward to other objects that took up and expressed capacities existing in it in a merely potential and undeveloped manner. Thus a metal like bronze "actualized" certain potentialities in copper and tin, but this actualization meant the appearance of new possibilities that it took the sculptor to realize and express. Or again, hay, which actualized certain capacities of the soil, was itself food for cattle, and the cattle, which digested and assimilated it, were in their turn fit subjects for nourishing carnivorous animals.

We noted in this connection that Aristotle rejected the idea of any general reservoir of self-identical Potentiality or stuff that can assume all Forms indifferently. Theoretically, there was of course such a thing as pure Potentiality, or *materia prima,* but this was never found. The simplest and least developed stuffs with which we had to deal were definite *Forms* of Matter, Matter of certain sorts, like the four elements. And once we were within the universe, every object possessed the Matter it did by virtue of having the Form it had. The tiger could not feed on grass, and hence grass was not material or potentiality for the tiger to actualize. Grass had first to be assimilated by the herbivorous animals which could feed on it, and which it was capable of directly becoming; and it was the

resultant actualized deer or cattle—not the grass that entered into them—which were capable of being turned into the tiger's flesh and blood. Or again, the sculptor could not work directly with tin or copper. He could only work with them after they had assumed the Form of bronze. Bronze, for which tin and copper provided the material, was stuff for his statue. In short, each new actuality meant a new potentiality, and there were as many different kinds of material as there were different sorts of Forms.

In the Aristotelian system, then, Form and Matter became interchangeable with Actuality and Potentiality respectively. Seizing upon this idea, Aristotle proceeded to construct a pyramidal universe, based upon those materials that had the widest possibilities of further development, and slowly narrowing as out of those possibilities tier upon tier of objects were slowly built up that it took more and more levels of Actuality to bring into being. Eventually the universe narrowed down to man, whose distinctive activity—that of reason—suggested only one possible Form or Actuality beyond it. Liberate reason from its human dependence upon the body, purify it from the elements that the body introduced into thought, depersonalize it, and make it, and it alone, the object of its cogitation, and we should have an activity that was pure Actuality without any residue of Potentiality in it—a being, in other words, that was the diametrical opposite of pure potentiality and that would provide the missing apex to the world.

At first sight such a being might seem to contradict Aristotle's assertion that Form and Matter went always hand in hand, and to be as impossible of conception as *materia prima.* But such was not the case. Stuff that was not any kind of stuff was, indeed, unthinkable. But a kind of being that was its own stuff, that looked neither forward nor back, that needed nothing else to bring it into being and sustain it, and that could become nothing beyond itself, was not inconceivable. In such a being the distinction between Form and Matter, Actuality and Potentiality, would have disappeared. All capacities would have been once and for all realized, and at the same time their realization would have created no new capacity for

anything else. It would be pure Form without Matter, but not without the concreteness and particularity necessary to enacted existence. Such a being, if it existed, would be God.

Logically such a being was necessary to terminate the otherwise incomplete and truncated pyramid presented by the known universe. Practically and dynamically it was also necessary, Aristotle felt, to explain the fact that the universe was not static, but was teeming with motion, life, consciousness, and rational thought, which appeared in an ascending series. The fact and the upward direction of this universal activity demanded a cause. There must be a Mover. Furthermore, this Mover, if it was to be an ultimate cause, a prime Mover, must itself be unmoved and uncaused. Not only must it be without an efficient, creative cause, but it could have no end or goal beyond itself. For if it were moved even by an unrealized ideal, it would not be pure Actuality but a striving towards, and a stuff for, something else. At the same time, it could not cause movement by creation or efficient causation, since that would imply effort and hence motion on its part. It could not even will the world into existence, as the Christians later thought might be the case, since willing would involve satisfaction of desire and thus introduce a process destructive of its unmoved character. It could then only evoke motion as an object of desire, not as the desire itself, evoked it. For an object of desire need not even be aware of the commotion it provoked. Much less need it be changed, or altered, or in any way perturbed, by the striving towards it which it inspired. To account for motion and to find a cause for it that should be itself absolutely unmoved in the act of causation was the second great metaphysical problem which Aristotle had on his hands.

So it was that we joined Aristotle in his hunt for a form of being that should bear the earmarks of an Unmoved Mover, and were by his side as he stalked, flushed, and eventually captured it. We noted first that change was of two sorts, locomotion and qualitative alteration, locomotion being the more fundamental, and that locomotion, again, was divisible into rectilinear and circular movement and their various combinations. But change of any sort, whether it was movement in

space or shift of quality, was definable as eventually an actualization of the potential. Furthermore in all change, be it spatial or qualitative, four causes could always be found operating. There was the stuff that was altered or shifted, or the material cause; the agent that initiated the movement or alteration, or the efficient cause; the line or form that the change took, or the formal cause; and finally the end or purpose of the change, or the final cause. The last three causes could be reduced to one, since the purpose or goal was identical with the Form assumed, and again the Form initiated and directed the process needed to attain it. For instance, in the process of human reproduction, human nature was the formal cause, since otherwise a litter of kittens or puppies might just as well result; embodied in the father it was the efficient cause; and its repetition in the child was the goal or end of procreation. Thus the four causes were reduced to two, Form and Matter.

These, as we had already seen, were identical with Actuality and Potentiality, and since it was a pre-existent Form which constituted the particular shape to be assumed by the Matter, and which operated upon the Matter in such wise that it assumed that shape, and in order that it might assume it, the actual proved to be prior to the potential. Startling as it first appeared, this doctrine commended itself to us on second thought. Potentiality was not blank. It was the potentiality of a certain actual sort of thing; and to be a capacity for that thing the actuality in question had already to be present in it. The grown man had to be there somehow from the beginning in the child, stimulating and directing its growth and acting as the goal and purpose of its development, if the child was to become a man, and not a horse or a cow. And even in a case of simple, mechanical locomotion the "whither" of the movement had to be already implicit in the shove that set it going, to determine that it should follow a given line and to afford the goal or the purpose for motion of that particular sort.

Turning from these more general considerations to Aristotle's Physics, we saw that alteration and rectilinear movement were peculiar to our earth, whose elements and organisms were also subject to generation and dissolution; whereas the

substance of the stars was unalterable and deathless and liable to circular movement alone. We further investigated the nature of space and time, and studied the Aristotelian astronomy with its complicated system of crystalline spheres, carried one within another and revolving in different directions, by which the seeming irregularities in the movements of the heavenly bodies were reduced to perfect circular motion about the earth as a fixed centre. We paused, here, to ask whether the everlasting and invariable revolution of the outer heavens, which imparts its motion to all else, might not be the Unmoved Mover, but we found that deathless, ageless, unchangeable, and self-completing though it was, it still possessed a potentiality of "whence to whither" that unfitted it to be a first cause. We had then to double back upon the scent and pick up the trail again.

Descending to the earth we caught the scent anew. For there we found not only inanimate objects affected mechanically by movement imparted from without, but also living organisms that exhibited novel functions like nutrition and reproduction and seemed to contain the source of their activity within themselves. In short, we had come upon something that looked self-moving. In following Aristotle in his investigation of the phenomena of life we were filled with admiration at his skill as a biologist and physiologist, but any hope that mere life might be a self-sustaining, perfected activity such as we were seeking was speedily dashed. Life, we found, appeared only in conjunction with a material body, and also provided a capacity for sensation that was actualized in all except the lowliest living organisms. Thus we had to pass at once from the "vegetative soul," as Aristotle called it, to the sensitive.

Here, on the sensitive level, we explored with Aristotle the various sense organs and the mechanism of perception. Sensation, we saw, was an ingestion by the organism of the sensible forms of external objects without their matter, just as the vegetative life depended upon an assimilation of their matter without their form. We noted particularly the theory that the sense organ in the act of perceiving actually took on the quality of the perceived object—the eye in seeing red itself turned red, the ear itself rang when we heard a noise. Then

there was the question of the "common sense" that organized and unified the reports of the different organs, and also the machinery of memory and imagination, to be discussed. Aristotle, we saw, had no idea that the brain was a sensory organ, but considered the heart to be the seat of consciousness, at least so far as the common sense, the passions, and the emotions were concerned. Incidentally he had something to say about the nature of desire and the will. Our discussion of the sensitive soul left us, to be sure, apparently as far away from the Unmoved Mover as ever, since sensation could be exercised only by a living body, and the full meaning of its data could be realized only by another function—the activity of thinking about what we perceived. Still, the scent was becoming stronger. Our investigation of desire had shown us how a mover might inspire motion, unmoved itself. The object of desire was not concerned with the feeling it excited. It neither pushed nor pulled; it simply attracted without exerting any force or undergoing any inner change. Furthermore we observed that certain states of consciousness seemed to be ends in themselves. They were without will or desire. They did not wish *to do* anything or *change* anything, but were content to be themselves. In some such state of consciousness, then, lay our best chance of finding the Unmoved Mover's lair. So we were off on the next stage of our hunt, feeling that something had after all been accomplished by our study of the sensitive soul.

We now passed to the rational soul, or the function of rational thought, the last covert in the known universe that remained unbeaten. This, Aristotle felt, was confined to man alone, though he insisted that no abrupt break could be made between animal and human consciousness. The human infant was born on the animal level, and only as it grew did it become rational. The distinctive mark of reason was its capacity for grasping the universal in the particular. It abstracted from the individual thing its intelligible Form, or essential nature, just as sensation sucked from it its sensible form, or perceptible qualities. Here we found a certain unresolved inconsistency in Aristotle's doctrine, since knowledge ought to have reality

as its object, whereas not the universal, with which it was concerned, but the concrete particular, which as such could not be wholly known, was the only real thing.

We next remarked certain connections and analogies between the activities of sensation and reason. Reason actually became the intelligible Forms it comprehended, just as the sense organ itself actually turned the quality it perceived. Again, just as the senses could not go behind sense data but had to accept them as irreducible and ultimate, so thought had simply to accept the Forms it came across for what they were. The essential nature of cat or dog, like red or cold, could not be analyzed into anything else. Nor were they developed or compounded not of other Forms. Even so comprehensive a genus as "animal" had its irreducible aspects. Its definition was not made up of the definitions of its different species, and did not need to refer to them in any way. At the same time, just as the "common sense" organized the data of the different senses into perceptible objects, so there was a function of "synthetic" or "discursive" thinking that combined Forms into propositions, argued from one proposition to another, and thus built up out of simple unanalyzable Forms a complex "body" of truth.

It was here that the possibility of error entered into thought. There could be no more question of mistake in apprehending the Forms we apprehended than in perceiving the sensible data we perceived. What we felt, we felt, what we thought, we thought. But just as the "common sense" might err when it came to referring sense data to external objects, so reason might go astray when it came to fitting the Forms together in the pattern in which they really belonged. This capacity of the intellect for error was also bound up with the association of the human mind with a body. Any intellect dependent upon the reports of the senses for its first information found its intelligible objects imbedded in a crumbling subsoil of obscure and contingent events sliding from the past to the future, whose why and wherefore was not apparent. Furthermore, so long as the mind had a body it could not even think without imaging its thoughts in sensible terms, and hence could never lift

them entirely clear of the clinging irrational element. Thinking, like perceiving, was an uncertain business. Only rarely, if at all, could one say "I know." For the most part reasoning could never get us further than tentative opinion. Given this inherent capacity for error, along with the necessity for thinking things out and the difficulties, under which the intellect labored, of attaining even provisional knowledge, our investigation of the rational soul seemed to be without result and to bring us little nearer the Unmoved Mover.

But the moment that we examined the ground more closely we discovered convincing evidence that our quarry, though hidden to the casual glance, could not be far away. For whereas sensation, being actually a reception of physical qualities, was in its potential state a capacity resident in certain physical organs, the intellect, being actually a reception of immaterial Forms, must even in its potential state be nonphysical, since the concrete and the individual could not turn into the universal and the abstract, and vice versa. A physical object, for example, might become circular, but it could not become circularity. On the other hand, the mind could not become circular, but it could and did identify itself with circularity when it entertained the concept or Form in question. In short, the potentiality of thinking did not lie in any bodily disposition, as the potentiality of sensation did. It could not be there, indeed, unless the body were there. But, when thought ceased no organ of thought remained, as the eye remained when it was closed. The intellect, then, had no stuff of its own, just as it had no structure of its own, apart from the ideas it entertained. Potentially it was a mere "place" where Forms might appear; actually it was simply the appearance of those Forms at that place.

Moreover, when a sense-organ perceived an object, it never assimilated it in its entirety; but when a Form was thought, it was all there. Then, too, although your sensation, say of an orange, was different from my sensation of it, my concept or definition of the orange was identical with yours. There were not two truths about the orange, yours and mine. There was only one truth, and that truth was somehow wholly and

indivisibly present in your intellect and in mine at one and the same time. Nay more, since thinking was nothing but the presence of thoughts or Forms, it looked very much as if your intellect and mine merely afforded two different "places" for the same Forms to appear. But when these Forms did appear and constitute what was actually being thought about, then the same thinking of the same thought was present in us both. It was only the possession of different bodies, and the association of the Forms with the different sets of images provided by different sets of sense-organs, that made our minds look as if they were also different and individual. This difficult point was illuminated by the every-day experience that, when two people are at work upon the same problem, they tend, as they become absorbed in it, to lose consciousness of themselves, to forget their difference from one another and from the common object of their thought, and to become actually a single mind with a single object in view. All that separates them is the fact that that mind is located in two bodies instead of one.

By this time we saw that we had cornered an Unmoved Mover if only we could be sure of our ground. The pure, impersonal activity of reason was the highest and the most enjoyable of all activities, and hence a fit object of the world's desire. Towards it all change might climb; for love of it the heavens might revolve. Furthermore it was purely contemplative. It did not desire, or wish, or will anything beyond itself. It needed no outer conditions to feed and sustain it. Nor was there anything higher to which it could contribute. In the vision of the truth, the whole truth, and nothing but the truth there was no looking backwards or forwards, nothing left for reason to assimilate, nothing more in which it could receive further expression. The vital question was, then, did such an activity exist? Our only experience of it lay in ourselves, and there it was only fleeting. One moment we had the truth in our grasp, the next it was gone. We alternated between light and darkness, with intervening periods of waiting for the dawn and of seeing the vision fade away in the twilight of forgetfulness. If this intermittence lay in the nature of the vision itself and not in the fallibility of human nature, then our

sense of triumph was premature, and perhaps the Unmoved Mover had escaped us for good and all.

At this juncture, we remember, Aristotle appealed to the priority of the actual. The passage from Potentiality to Actuality was inspired and directed by the Form of the thing that the potential was to become. Thinking was no exception to this rule. It must be brought from the potential to the actual by that which it became. Now, in every case with which we had heretofore dealt this passage involved a change of quality or position. The object became *other* than it was before. The bronze, at the sculptor's behest, turned into a statue; the child, directed by the human Form within him, grew to a man. But the possibility of thinking was not something different from thinking itself. Possible thoughts did not change their character when they came to be actualized, as the possible statue in the rough changed into the actual statue. Forms, whether present or absent, were the same Forms. The only difference between their actual and their potential state was simply the difference between presence and absence. The actualization, then, of the potential intellect, or the passage of the intellect from passivity to activity, meant not a transformation from below. It meant a sudden flash of information from above. And this flash could take place only if the information were really there. The partial and intermittent appearances of the Forms in the different "places," or potential intellects, connected with different sentient bodies could only be explained, then, on the hypothesis that the whole truth, the entire intelligible system of Forms, existed of itself, and grasped itself in a single, all-comprehending act of thought, to which space, time, and individuality were irrelevant.

This act of thought that constituted our minds when they were active was not, of course, a personal consciousness. In fact, when it was present and operative in us so far as our bodies were able to receive it, it abolished our individual personalities and turned us, if we could still speak of *us*, into mere "places" where the truth could display its impersonal and universal nature. The universe was like an opaque substance

dotted here and there with holes. The opaque substance was the physical world, whose enactment of the Forms dimly revealed the intelligible structure of the universe through an obscuring, distorting medium of change and space and time. The holes through which the light of truth could shine without let or hindrance were our passive intellects. When our reasons were not active, these holes were blank. When we were puzzling and arguing, they were more or less faintly luminous. But at those rare moments when the capacity of the intellect was fully realized and the truth was revealed, these holes were completely transparent to, and indistinguishable from, the intelligible system of Forms that filled them.

The active reason in us survived our death. But this did not mean that we were personally immortal. On the contrary, our sensory experience, emotion, desire, will, and passive reason—in a word, all that made us people and individuals—went out of existence when the body was destroyed. The hole that with its semi-luminous rim of life, sensation, and passion, and its flickering content of Forms, constituted you or me was simply closed and done away with when we died, although the impersonal, timeless thinking of the Forms by themselves, which at times crowned and illuminated our experience, was not disturbed. We noted at this point the distance that separated this view from the Platonic doctrine of personal immortality held by Aristotle in his youth, when he wrote the *Eudemus* in memory of the friend who fell in battle fighting with Dion in Sicily.

It looked now, as if we had found in the active reason a state of being that would serve as the Unmoved Mover. Indeed many critics have identified this activity with God. But the point, we found, was open to discussion and controversy. The active reason comprised the whole intelligible structure of the universe, the entire ladder of Forms from the lowest to the highest. But a perfectly self-contained and self-satisfied activity could scarcely be occupied with a subject other than itself and with a multiple and complex subject at that. Moreover, the highest Form in the whole realm of being must be the nature of reason itself. The best Form of being, then, would be a Form of active reason that was concerned, not with other

Forms, but simply with its own. Its thought must be merely a thinking about thinking. This view seemed to be more in accordance with the Aristotelian text and to have perhaps the weight of critical opinion in its favor. So we ended by conceiving the Unmoved Mover as an activity of reason meditating simply upon the nature of reason as such, not only careless of the fortunes, but ignorant even of the existence, of anything besides itself.

We pointed out in passing the logical difficulties of such a concept and its inadequacy as an object of religious devotion and as a source of religious consolation. We also found Aristotle in somewhat of a quandary as to whether there were one or many such Movers. His primary impulse was monotheistic, but the monotheistic hypothesis would not explain the plurality of equally perfect circular motions demanded by his astronomy. It seemed as if each separate sphere must have its own prime Mover to keep it revolving in its particular direction. Hence we were obliged to raise and leave open the question whether Aristotle succeeded in remaining a monotheist, or had to turn polytheist at the end. But whatever his decision might be, we were sure it would be dictated by purely scientific motives, since we had come to the conclusion that his theology was, after all, a sort of super-physics, and that the existence and nature of his God were primarily and essentially a necessary scientific hypothesis rather than a matter of religious experience and belief.

Having disposed of Aristotle's study of the physical sciences, and his biology, psychology, theory of knowledge, metaphysics, and theology, we took up his logic. Here we found him first analyzing our thinking with its ultimate parts of speech, or categories. Most important of these was the category of *substance*, to which he devoted considerable attention. He then turned to the propositions in which terms are so connected as to express an action or situation of some sort, and laid down the rules governing the correct positive and negative inferences that can be drawn from a simple statement. This led him to a consideration of things like distribution, conversion, inference by opposition, and the like. Next, we saw

him dealing with more complicated propositions in which subject and predicate were linked together, either explicitly or implicitly, by a third or middle term, and developing the structure of the syllogism in all its variety, with its major and minor premises and its conclusion. The technical correctness of syllogistic inference was, we discovered, independent of the soundness of the premises or of the actual existence of objective counterparts to the terms employed. Argument about nonexistents was, however, useful as a logical exercise, and we had always to remember that in most of our reasoning we were concerned, not with certainties, but with probabilities only.

After this discussion there came an exposition of the so-called "theory of the predicables," in which the difference between essence, property, and accident was explained, and instructions were given for the proper method of reaching the genus from the species, or the species from the genus, through an ever widening or progressively narrowing series of concentric, distinguishing characteristics, or *differentiae* as Aristotle called them. Then came an enumeration and analysis of the various logical errors by which our thinking is habitually beset, and then Aristotle took up the subject of inductive as opposed to deductive reason. Heretofore, we had been concerned with arguing from general principles to particular cases. It now became our business to discover how general principles were obtained.

Clearly they were obtained by a comparison of individual data and an extraction of the common element. Aristotle attempted, though not too successfully, to apply the syllogism to this process. There was always a doubt whether all possible cases had been observed, and therefore whether any absolutely certain sweeping statement could be made regarding them. Still, in spite of this difficulty we could directly grasp or intuit more and more universal features in things. An object was *some* kind of object, a *kind* of object was a subdivision or species of some wider class, till eventually we reached the widest possible concepts or categories, which science and philosophy had to take as their premises. These concepts could not be demonstrated since they could not be made examples of any more general

form or rule. No reason could be demanded for anything that we considered to be itself an ultimate reason for everything.

This consideration involved us in a discussion of the method of science. Science, we saw, was primarily a process of induction, of extracting general laws and forms from particular data. But in this process something had to be taken for granted, and that something had to be true. Pure logic could infer technically correct conclusions from false premises, and practically useful conclusions from ones that were only probable. But the premises from which science started must correspond to objective fact. The conclusions drawn from these axioms had to follow from them necessarily, paralleling the necessity with which in the objective world the effect must follow from the cause. The object of science was so to apply these axioms that in its subject matter the difference between essential and accidental properties was laid bare. A good part of science, then, consisted of accurate *definition* of the phenomena under scrutiny. The datum had to be related to its highest genus by the proper series of concentric *differentiae* arranged in their correct order. In this way we discovered the essential property that was "commensurately universal" with its subject. Moreover, scientific demonstration involved a reference to the objective cause of the phenomenon in question. And it must show, not only that the phenomenon followed necessarily from the adduced cause, but that no other cause could produce it. The logical sign of such a connection would be a "reciprocating proposition," in which subject and predicate were co-extensive and capable of conversion without changing the extension of either in the process. To reach such a proposition, the correct objective link or middle term that connected the event with its cause, or, in other words, that was "commensurately universal" with the event, must be rigidly determined. All in all, then, the method of science was one of continually testing and correcting inductive inference of universal laws from particular data by a reverse deduction of the data in question from the universal law they suggested.

From the *logic* we turned to Aristotle's ethical theory. Here we found a development of thought similar to that which char-

acterized the growth of his metaphysical speculations. He began as a good Platonist convinced that there was an absolute Good laid up in heaven, and that ethics was an exact science whose business it was to discover a mathematically rigid and universally applicable formula of right living. This he found in the life of God, upon whom he felt that man should model himself. But by the time he came to write the *Nicomachean Ethics* he had become wholly realistic or relativistic in tone. Ethics was now an empirical, not an exact science, and the only good with which it was concerned was one determined by the nature and the activities of the human organism and valid for them only. The imitation of God had practically disappeared, except in so far as our highest activity, that of reason, gave some faint indication of what the divine life was like. But this activity, we noted, fell entirely outside the strictly moral sphere, and was indeed at its best in us when we took a thoroughly scientific, impartial, non-moral attitude towards life. Morality, in short, had become a purely human affair without supernatural implications or support.

Proceeding in accordance with this conclusion, Aristotle defined the human good as that which was sought for its own sake and for the sake of which all else was desired. To such an end we all agreed that the term *happiness* might be applied. Various candidates for this position and title, like wealth, fame, amusement, pleasure, or some absolute Platonic Good, were interviewed one by one and their pretensions disallowed. Some of them were obviously means to a further end. Pleasure, to be sure, was not quite in that class. It was an inevitable companion of happiness, upon which it rested like the bloom of youth upon a mature cheek. However, its goodness was not intrinsic but was conditional upon its accompanying such activities as made for happiness.

Happiness, then, still had to be defined. Its nature Aristotle now located in the exercise of man's distinctively human activities. What set man apart from the other animals was his possession of reason and his ability to live according to its dictates. Happiness, in a word, lay in self-realization—the completest possible flowering of the whole man as a rational

being. To attain happiness of this sort a certain length of life and certain external conditions were necessary. Still, the core of happiness, the life of reason, was practically proof against misfortune. It could be had and lived even under comparatively painful external circumstances.

Happiness being thus defined, we had next to ask how it could be obtained. This question opened up a discussion of the nature of moral virtue or excellence. Living rationally meant organizing and harmonizing the different activities of our nature according to a certain rule, conformity with which made them morally good, departure from which, morally evil. This rule was the famous *golden mean.* Morally virtuous or excellent action was a mean between the extremes of deficiency and excess, both of which were vices. This fact Aristotle exemplified at length, showing also that repeated action in accordance with the mean built up a virtuous habit of behavior. At the same time he took care to point out that even the golden mean was relative to the individual involved. What was right for one man might be wrong for another. Determining rights and wrongs demanded the exercise of reason with respect to each particular case. Furthermore, we were never to forget that the moralistic life was not an end in itself but a means to something higher, in promoting which it found its only justification. Virtue was not practiced for virtue's sake but for the sake of happiness. Indeed, if its practice brought unhappiness it was not virtue.

To the nature of justice Aristotle devoted considerable space, and here he opened up a new vista. The justice or injustice of an act, we found, depended upon the *intention* of the agent. Indeed the question of moral virtue could not be adequately discussed without considering moral responsibility, and this in its turn demanded a definition of voluntary as opposed to involuntary or non-voluntary behavior. An act, we decided, could not be called voluntary unless it were committed under no external compulsion, with full cognizance of the circumstances, and as the result of a deliberate choice. Whether moral responsibility also necessitated freedom on the part of the agent to act independently of the pressure of his own nature

was a problem that Aristotle only vaguely approached and never dealt with.

From the question of moral, Aristotle not unnaturally passed to that of intellectual virtue, since the exercise of wisdom was the essence of morality. Such wisdom was of course practical, directed as it was upon every-day life. But its excellence lay in the soundness of the vision that it brought to bear upon practical problems, or, in other words, in its apprehension of the truth. Generally speaking, then, whether practical or theoretic, intellectual virtue consisted in thinking logically and truly. Quite apart, too, from its practical utility, the contemplation of truth was an end in itself, and was productive of pleasure and happiness. Indeed, being the highest of our activities, it was the richest of them all in its contribution to happiness, and the enjoyment that attended it was the supreme pleasure. So, from all points of view, any hard and fast distinction between purely speculative and practically useful thinking tended to break down.

There remained a final difficulty of explaining why the organism was so refractory to the guidance of reason, and why, with eyes wide open to what was best for us, we deliberately acted against our own interest. The answer lay in what Aristotle called *incontinence*—or an habitual tendency in human nature, grounded in passion and desire, to refuse to act in accordance with knowledge of the good. This refusal, however, was not irrational. The rebellion of desire was not a pitting of unreason against reason. Passion put up an argument, and the conflict was one of syllogism with syllogism. Desire stated that all pleasant deeds should be performed, and was sure that the contemplated act was pleasant. Reason declared that deeds of the sort in question should not be performed, but it might not be quite sure whether the contemplated act fell within that class. Hence through weakness of its minor premise it might present the feebler case. And logic, not passion alone, demanded that action should embody the conclusion drawn from two strong premises rather than from one strong and one weak one. When, however, there was no hesitation in the minor premise of the rational syllogism we had either

virtue or out-and-out vice—virtue, when we were *sure* the misdeed suggested by passion *ought not* to be done and therefore did not do it, vice when we were *sure* it was the thing to do, and, therefore, having no scruples on that score, proceeded to perform it.

In the books on Friendship introduced into the *Nicomachean Ethics* Aristotle shifted from the individualistic to the social aspect of morals, and thus prepared the way for his discussion of the state. We found him distinguishing three types of association, friendships based upon the reciprocal benefit and the reciprocal pleasure individuals get out of their partnership, and the friendship of the good in which the individual is loved not for what we may get out of him but for himself alone. The last type of social bond led Aristotle to take up the question of self-love and self-interest. Here we discovered that in the long run selfishness and altruism became indistinguishable, since man's true self was social and included other people. To love this self was to love others, and conversely love of others was the deepest form of self-love.

Coming at length to Aristotle's theory of politics, we saw that here as elsewhere he had had his Platonic epoch. The earlier portion of the work showed a belief in the feasibility of Utopias, though not of the Platonic ideal commonwealth. This he was already criticizing at length. The gist of his criticism —that the individual himself could not be communized and rendered immune to the distinction between mine and thine—we may remember, as also the contention that without private interest there can be no public interest, since all interest is located in the individual and is felt by him as *his*. To communize women and children and property would, then, by outraging his instinctive private interests create an irreconcilable conflict between the common and the private welfare, and would deprive the individual of the self that he should freely put at the service of society.

Upon this preliminary criticism of the Platonic and other Utopias there followed the construction of his own ideal state —a very small, self-contained, self-sufficient community governed preferably by one man of superlative wisdom, but, fail-

ing that, by a superior governing class, or, at a pinch, by a democratic government under strict constitutional limitations. Upon the advantages of kingship Aristotle expatiated at length. Upon the necessity of limiting any and every form by a constitution and thus preventing kingship from degenerating into tyranny, aristocracy into unbridled oligarchy, and democracy into mob rule, he was emphatic. To the breeding and education of the citizens of the ideal state he devoted considerable space, stressing eugenics and regulation of the birth-rate in the one case, and in the other the function of liberal education as a preparation primarily for knowing how to live rather than how to make a living.

In the later portions of the *Politics* Aristotle had no more to say about Utopias, but devoted himself to an analysis of conditions as they actually existed. One by one he took up the various forms of government, even the hated tyranny and the despised mob-rule of democracy at its worst, analyzed them, pointed out their characteristic weaknesses, and prescribed for them with an almost Machiavellian cynicism the measures they should adopt if they wished to survive. In particular he warned them of the plague of revolution that threatened them all alike, and explained, with applications to each particular case, its causes and its cure.

Finally in Book I, which we treated as a kind of addendum, we saw Aristotle endeavoring to show the naturalistic basis of the state and of social institutions. Man was instinctively a social animal, and upon this gregarious instinct the state rested, though the more complex aspects of society were also the result in part of deliberate planning. From the biological fact of the association of two individuals in reproduction arose the family, the primary social unit; from the association of families came the village; from that of villages the commonwealth. To the family, then, we might look for the root of all social restitution and interest, and there we actually did find them in embryo. The management of the family by the husband presaged government and especially monarchy; the simple belongings that it necessarily amassed foreshadowed the institution of property; its subjection and domestication of

lower animals justified slavery. The book ended, and with it our review of the *Politics* terminates, in a discussion of the status of slaves.

Last of all, we have just been watching Aristotle deal with rhetoric and the fine arts and especially with tragic poetry. But here our memory should not need to be jogged.

# APPENDIX

# I. CHRONOLOGICAL TABLE

| | |
|---|---|
| 399. B. C. | *Trial and execution at Athens of Socrates on charges of impiety and corruption of the youth by his teachings.* |
| 399—395. | *Plato, along with other pupils left Athens for political reasons. Many, Plato among them, took refuge with Euclid at Megara. Further possible travels of Plato in Egypt and Cyrene. Possible return to Athens about 395.* |
| 399—394. | Sparta at war with Persia, as a result of Persia's retaliatory expedition against Greek cities of Asia Minor that took part in the Anabasis of Cyrus. The Persian satrap, Tissaphernes, defeated by the Spartan King, Agesilaus. Persia in revenge stirred up Corinth against Sparta. Corinth joined by Thebes, Argos, and Athens. Aided by the Persians, the Allies defeated the Spartan fleet at the battle of Cnidus (394) and inflicted so severe a check upon the nominally victorious Spartan army that the victors could not exploit their success, but retired to the Peloponnesus. The Athenian admiral Conon rebuilt the long walls with the aid of Persian money and men. |
| 391. | The Carthaginians were all but expelled from Sicily by Dionysius I. |
| 395—387. | *Possible further travels of Plato. Composition of the earlier dialogues* Euthyphro, Apology, Crito, Charmides, Laches, Lysis, Euthydemus, Protagoras, Gorgias, *and* Meno, *and possibly the* Symposium *and the* Phaedo, *the first part of the* Republic *and* Phaedrus. |
| 387. | *Plato's first trip to southern Italy and Sicily. Visited the Pythagoreans and particularly the philosopher Archytas at Tarentum. At the in-* |

*vitation of Dion, brother of Dionysius I of Syracuse, he extended his visit to Sicily and visited at the tyrant's court. As the result of a quarrel with his host, he was sold into slavery, ransomed by a friend, and returned to Athens.*

387. Peace of Antalcidas between the Greek states and Persia. Greek cities of Asia Minor abandoned to Persia. Athens retained islands of Lemnos, Imbros, and Scyros. Foundations of second Athenian Empire laid.

Circ. 387. *Plato founded his Academy at Athens.*

387—367. *Plato taught at Athens. Composition of the rest of the* Republic, *of the* Theaetetus *and the* Parmenides.

385. *Birth of the philosopher Aristotle at Stagira in Thrace.*

383. Birth of the anti-Macedonian orator Demosthenes.

382. Birth of Philip of Macedon.

379—362. Wars between Sparta and Thebes.

378. Athens joined Thebes against Sparta. New Athenian Empire formed, consisting of a confederacy of seventy communities. Spartans repeatedly defeated at sea by the Athenians.

377. *Death of the philosopher Euclid, the founder of the Megaric School.*

371. The Battle of Leuctra. The Spartans signally defeated by the Thebans under Epaminondas. Sparta made peace with Thebes and Athens.

371—362. Hegemony of Thebes.

370. The Peloponnesus invaded by the Thebans under Epaminondas and Pelopidas. Sparta aided by Athens.

369. Second Theban invasion of the Peloponnesus.

367. Third Theban invasion of the Peloponnesus.

367. Death of Dionysius I of Syracuse. Accession of Dionysius II under the tutelage of his uncle Dion, Plato's friend.

367. *Plato's second trip to Syracuse, to instruct Dionysius II, at Dion's behest, in the art of government, and incidentally with the hope of*

*trying out the theories of government expounded in the* Republic.

367. *The youthful Aristotle arrived from Macedon at Athens during Plato's absence, and became a student at the Academy.*

366. *Plato after an unfortunate and unsuccessful sojourn at Syracuse, embittered by Dionysius' exile of Dion, returned to Athens.*

365. *Death of the philosopher Antisthenes, founder of the Cynic School.*

362. Fourth Theban invasion of the Peloponnesus.

362. Battle of Mantinea. The Thebans successful, but Epaminondas killed. General peace made among all Greek states, from which Sparta alone held aloof.

361. *Plato's third trip to Syracuse at the invitation of Dionysius II, and in the hope of reconciling the tyrant with Dion. This trip as unsuccessful as the second. Plato finally disillusioned in his hopes of Syracuse. Quarrelled with Dionysius. Remained for a year virtually a prisoner.*

360. *Plato returned to Athens.*

Circ. 369—360? *Plato probably wrote the* Sophist, *the* Statesman *and the* Philebus.

359. Accession of Philip II to the throne of Macedon.

357—356. *With the approval of Plato, Dion fitted out an expedition against his uncle Dionysius II. The expedition successful. Dionysius fled and Dion seized the city, only to be assassinated by his fellow-pupil at the Academy, Callippus.*

Circ. 356—347? *Plato wrote the* Timaeus, *the* Critias *and the* Laws.

357. Philip of Macedon, extending his power in Thrace, began his encroachment upon Athenian possessions. Alliance with Olynthus against Athens.

357—355. As a result of the so-called Social War of the Athenian League against Athens, the second Athenian Empire began to fall to pieces. Chios,

Cos, Rhodes, and Byzantium revolted successfully and established their independence.

356. Birth of Alexander the Great.

Circ. 356. *Death of the philosopher Aristippus, the founder of the Cyrenaic School.*

355. Beginning of the second Holy War by Thebes, Locris, and Thessaly against the Phocians who had plundered the temple at Delphi. Philip of Macedon interfered in the struggle and defeated the Phocians.

352. Philip advanced as far as Thermopylae, where he was opposed and his progress temporarily checked by an Athenian army.

351. Demosthenes delivered his first "Philippic," warning Athens against the rising power of Macedon.

348. The Chalcidic towns in Thrace, leagued with Athens against Philip, were insufficiently supported by her and were conquered by him one by one.

347. *Death of Plato at Athens.*

346. Peace of Philocrates, by which Athens tamely ceded all occupied territory to Philip. Philip pushed through Thermopylae, advanced to Delphi, and had himself elected to the Amphictyonic Council.

347—343. *Aristotle, having left Athens after Plato's death, lived for a time with his friend Hermeias, Prince of Atarneus and Assos, and then at Mytilene on the island of Lesbos, where he devoted himself to biological research. To this period belong some of his biological treatises, probably the dialogue* On Philosophy, *the* Eudemian Ethics *and the earlier portions of the* Physics *and* Metaphysics, *possibly also certain portions of the* Politics. *After Hermeias' death, Aristotle married his niece and adopted daughter, Pythias, by whom he had a daughter of the same name.*

346—344. Extension of Macedonian power in Thrace, Thessaly practically incorporated in the Mace-

donian kingdom. Philip intrigued in the Peloponnesus and defeated the Spartans.

343. Macedonian invasion of Epirus. Revolt of Thessaly, instigated by Athens, put down.

343. *Aristotle invited by Philip to come to Pella, the Macedonian capital, and tutor the young Alexander the Great.*

343—340. *Aristotle at Pella.*

342. Outbreak of war between Macedon and Athens.

341. Demosthenes' third "Philippic" oration. Alliance of Athens with Byzantium, and later with Achaea, Arcanania, Leucas, Corinth, and Megara.

340. Philip made Alexander regent, and *Aristotle's period of tutoring the prince ended.*

340—335. *Aristotle perhaps at Pella, but more probably at his native town, Stagira.*

340. Philip besieged unsuccessfully Byzantium and Perinthus.

339. Relief of Byzantium by the Athenian fleet.

339. The Amphictyonic Council appealed to Philip for aid in punishing the Locrians, whom they accused of sacrilegious treatment of Delphi. Philip seized the opportunity, gained permission from the Thebans to cross their territory on his punitive expedition, passed Thermopylae and entered Boeotia. Demosthenes was sent on a mission to Thebes, and succeeded in winning her over to the Athenian cause.

338. Battle of Chaeronea, Alexander's first appearance on the battle-field. Decisive defeat of the Allies, followed by the submission of Athens and all the Greek states, save Sparta, who alone held out.

338. Congress of Corinth. The Greek states all united under the suzerainty of Philip, but with local autonomy.

336. Assassination of Philip. Accession of Alexander the Great. Unrest among the subject-states. Revolt of Thebes suppressed and the city razed to the ground.

335. Alexander crossed into Asia and attacked Persia.

335. *Aristotle returned to Athens and founded the Lyceum. To the next twelve years belong, with the exceptions already noted, all his extant works. Also, during this period, probably, his wife died. After her death he became attached to a lady from Stagira named Herpyllis, whom he never legally married, but by whom he had a son Nicomachus, later editor of the* Nicomachean Ethics.

334—330. Alexander's Persian Campaign. The battles of Granicus (334) in the Troad, and Issus (333) in Cilicia, the capture of Tyre (332) followed by the submission of Palestine and Egypt. Triumphal entry into Memphis. The founding of Alexandria. Alexander received from the oracle at Ammon the assurance that he was the son of Zeus and semi-divine. Return to the Euphrates (331), Battle of Arbela near Nineveh (331). Entry into Babylon. The fall of the Persian Empire. Death of Darius III (330).

327—323. *Growing coolness between Aristotle and Alexander. Callisthenes, Aristotle's nephew, historian of the Expedition, unjustly accused of treason and executed. Aristotle himself accused of disloyalty.*

327. Alexander invaded northwestern India and crossed the Indus. Battle of the Hydaspes. Defect of Porus, the local king. Conquest of the Punjab. Refusal of the soldiers to proceed further eastwards (326).

326. Alexander descended the Indus to its mouth. Conquest of the lower Punjab and Sind. The storming of Mooltan. Alexander wounded. Return northward through Baluchistan.

324. Descent of the Euphrates. Death of Alexander's bosom-friend, Hephaestion. Return to Babylon.

323. Death of Alexander.

323. Revolt of Athens and other Greek cities against

Antipater, the Macedonian regent, an intimate friend of Aristotle's. Beginning of the Lamian War.

323. *Aristotle suspected of pro-Macedonian sympathies, and accused of impiety. Retired from Athens to his country estate near Chalcis in Euboea. His friend and pupil Theophrastus left in charge of the Lyceum.*

322. *Death of Aristotle near Chalcis.*

322. End of the Lamian War. Athens garrisoned by Macedonian troops. Flight and death of Demosthenes.

# II. BIBLIOGRAPHY

For short accounts of Aristotle the histories of Ritter, Robin, Thilly, Weber, Windelband and others may be consulted.

*Oxford Translation of Aristotle's Works.* Ed. W. D. Ross and J. A. Smith. (Now nearly, if not entirely, complete.)

J. Burnet. *The Ethics of Aristotle.* (Introduction and Notes.) London, 1909.

S. H. Butcher. *Aristotle's Theory of Poetry and Fine Arts.* London, 1927.

I. Bywater. *Aristotle on the Art of Poetry. Oxford,* 1909.

G. Grote. *Aristotle.* 2 vols. London, 1872.

T. Gomperz. *Griechische Denker,* Vol. III, Bk. VI, Leipsig, 1909. (Eng. trans. Vol. IV.)

R. D. Hicks. *De Anima* (Text, Trans., and Comm.) Cambridge, 1907.

W. W. Jaeger. *Studien zur Entstehungsgeschichte der Metaphysik des Aristoteles.* Berlin, 1912.

*Aristoteles.* Berlin, 1923.

B. Jowett. *The Politics of Aristotle.* 2 vols. (Trans. with Introduction.) Oxford, 1885.

F. Ravaisson. *Essai sur la Metaphysique d'Aristote.* 2 vols. 2nd ed. Paris, 1913.

L. Robin. *La Théorie Platonicienne des Idées et des Nombres d'après Aristote.* Paris, 1908.

E. Rolfes. *Die Philosophie des Aristoteles.* Leipsig, 1923.

W. D. Ross. *Aristotle.* New York, 1924.

J. A. Stewart. *Notes on the Nicomachean Ethics.* New York, 1892.

E. Zeller. *Die Philosophie der Griechen.* 6 vols. (Editions of the different volumes of 1869–1909. English translations of all but the last volume. For Aristotle, see *Aristotle and the Earlier Peripatetics.* 2 vols.

# INDEX


Academy, 4–6, 17, 19, 141
Accidental sensibles, 108
Achilles, 306, 329
Activity, 56; relation of pleasure to, 203, 208; voluntary and involuntary, 228
Actuality, 55; the actual as form, 56; priority of the actual, 57; relativity of the actual: passing from potentiality to, 60, 332; transition from actual to action intellect, 133, 341
Aesthete, as judge of art, 309
Aesthetic values, 302, 305, 307, 317
Æther, 35, 37
Alexander of Aphrodisias, 141
Alexander the Great, 9, 11–12, 13, 14, 15–17, 19, 21–25
Altruism, 261
Amusement, 201, 304, 307
Amyntas II of Macedon, 3
Andronicus of Rhodes, 29
Animals, classification, 100
Antigone, 320, 322
Antipater, 10, 16, 20, 23, 25, 27
Antisthenes, 214, 232
Apellico of Teos, 28, 29
Appetite and will, 250
Appropriateness of style, 298
Argument, lines of, 300, 301
Aristocracy, 270, 272, 274, 286
Aristotle, life of: compared with Plato, 1; family background, 2; at the Academy, 4–6; attitude towards Plato, 5, 32, 34, 37, 331; description of: intellectual genius, 5, 18; writings, 5, 8, 18, 19, 20, 28, 29, 32, 34; at Assos, 7; at Mytilene, 8; the Lyceum, 8, 18–20, 26; domestic life, 8, 20; return to Macedon, 9; relations with Alexander the Great, 9, 11–12, 13, 19, 21, 23; political ideas, 13, 21; return to Athens, 17; scientific researches, 18; obliged to leave Athens, 26; death: will, 27; fate of writings after his death, 28; development of metaphysical theory, 31–51, 331; form and matter: the actual and the potential, 52–72, 332; differs with Plato about form and matter, 60, 65; opposition to Atomists, 68, 74; physics, 73–84, 335; search for the unmoved mover, 85–117, 334; biological investigations, 92; explanation of vital processes, 97; psychology, 102, 107; approach to the unmoved mover, 118–140; disbelief in personal immortality, 139, 342; discovery of the unmoved mover; 141–161, 343; theology, 145; God a scientific hypothesis, 150; scientific difficulties, 153; possible polytheistic, 158; logic, 162–195, 343; on the categories, 163; ethics, 196–264, 345; political theory, 265–293, 349; rhetoric, 294–302; poetics, 302–330
Art, 244, 245; virtue of, 280; an imitation of nature, 302; not subservient to morals, 304, 305; pleasure the end of, 304, 308; good and bad, 305, 309, 310; material, 305; treatment of material: idealistic, 306; judgments of, 309, 310
Association, bonds of, 260
Astronomy. *See* Spheres
Athens, anti-Macedonian campaigns, 14, 15, 26
Atomists, Aristotle's opposition to, 68, 74
Attributes, essential, 188

Audience, types: methods of appealing to, 296
Averrhoes, 143

Becoming, 55
Beginning, of plot, 312
Being, 44, 48
Being true, 245
Biological investigations of Aristotle, 92
Birth-control, 279
Body, relation to soul, 89
Body, space, time and motion, 73
Brevity, in plot, 326

Calculative activity, 243
Callipus, 81
Callisthenes, 8, 23
Carthaginian constitution, 269
Categories, 163
Catharsis, 311; meaning of, 314
Cause. *See* Motion
Causes, the four, 53, 194, 335
Celestial mechanics, 80. *See also* Spheres
Ceremonial speeches, 300
Chance and necessity, 154
Change. *See* Motion and change
Character delineation, 321
Children, communizing of, 266; deformed, 278; training, 279
Choice, 230
Chorus, in tragedy, 326
Christian God, 149
Church, medieval, acceptance of Aristotle's theology, 149
Circular motion, 79, 83
Citizen, good, 269; duties and qualifications, 270, 283
Citizenry, ideal, duties: education, 278, 288
Citizenship, restriction of, 270, 277, 283
City, in the ideal state, 276
Class divisions, 270, 277, 278, 283
Classification, 45; of animals, 100
Clearness of style, 298
Coincidence, 313
Common sensibles, 108, 112
Communism, 266, 269
Community meals, 277
Compulsion, 229
Concreteness, 43
Consciousness, 129
Constitutionalism, 270, 272, 274, 286, 293
Constitutions, study of, 265, 266, 269; good and bad, 270
Contemplative thought, 201, 243, 244, 254, 348; *vs.* practical activity, 246, 253; superiority of, 257
Continence, 248, 251, 252
Contrary qualities, 166
Conversion, inference by, 168
Courage, 222
Creator. *See* God
Cretan constitution, 269
Cynic morality, 201, 202, 203, 214, 215, 232
Cyrenaic hedonism, 201, 204

*De Anima,* 140, 144
Death, happiness extended beyond, 213
Deduction, 181, 190
Definition and demonstration, 191
Definitions, 186
Deliberation and choice, 230
Demagogues, 282, 286
Democracy, lack of leisure in a, 282; for an agricultural people: preserving, 284
Democritus, 68, 69, 74, 85, 89
Demonstration, 183, 190; scientific, 185, 345; and definition, 191
Demosthenes, 20; anti-Macedonian campaign, 10, 11, 26; death, 27
Dénouement, 326
Desire, 114, 116, 250
Despotism, 275, 282
Diction, poetic, 327
Differentiae, 165, 175, 344
Dionysius I of Syracuse, 7
Discovery, in plot, 324
Distribution of terms, 169
Divine intelligence. *See* God
Divine nature of man, 198
Divisibility, 120
Dramatic poetry. *See* Poetry

Dramatic unities, three, 311
Dualism, moral, 253

Economic theory, 268, 277, 292
Education of an ideal citizenry, 278, 288
Efficient cause, 53, 194
Egoism, 261
Elements, four, 85
Emotions, music as stimulus to, 280; appeals of oratory to, 296; purging away of excess, 315
Empedocles, 89, 97
End, of argument, 301; of plot, 312
Endurance, 252
Entelechy, meaning of, 55
Epic poetry, 310, 327; compared with tragedy, 328
Epicurean Gods, 147
Epilogue, 301
Equity, 227
Error, possibility of, 121
Essential attributes, 188
Ethics, Aristotelian, 196–264, 345; naturalism, 198; human good — human happiness, 199; criticism of Plato's attack on pleasure, 200; criticism of hedonism, 204; relation of pleasure to happiness, 208; nature of happiness, 211; of virtue, 215; the golden mean, 218; virtue as a mean state, 220; justice, 225; moral responsibility, 227; deliberation and choice, 230; virtue a means, not an end, 232; freedom of the will, 235; self-determination and responsibility, 236; free will of indifference, 239; virtue and practical wisdom, 242; contemplative *vs.* practical activity, 246; incontinence, 248; not dualistic, 253; superiority of contemplative activity, 257; friendship, 260
Ethics, Platonic, 196, 198, 199, 201, 218, 233, 255
Ethics, Socratic, 237, 240, 247, 250
*Eudemian Ethics,* 5, 8, 19, 30, 32, 34, 197, 198, 199, 331
*Eudemus,* 89, 140, 331, 342
Eudemus of Cyprus, 19
Eudemus of Rhodes, 19, 141, 160
Eudoxus of Cnidus, 36, 37, 80, 160, 201, 204, 206, 208
European drama, influence of Aristotle upon, 302, 311
Evil, 155; place in art, 307
Evolutionary and Aristotelian theories compared, 85
Example, 297

Fallacies, 176
Family, the, 290; the state in miniature, 291; in tragic plot, 324
Figures of the syllogism, 179
Final cause, 53, 194
First cause of motion, 83, 151, 160, 335
Form and matter, 52; unity of, 47, 332; four causes, 53; nature of motion and change, 54; priority of the actual, 57; relativity of the actual, 60; multiple nature of potentiality, 62; individuation, 64; conditions of qualitative change, 65; no single homogeneous matter, 68; matter not corporeal, 70
Formal cause, 53, 194
Forms, Platonic, 38, 60, 67; ladder of, 85
Four causes, the, 53, 194, 335
Four elements, 85
Free will of indifference, 239
Freedom of the will, 235
Freemen, 270, 277, 292
Friendship, 260

Galen, 180
Genus, 165, 175, 193
God, 35, 36, 47, 331; active reason identified with, 141; nature of, 143; function of, 145; Christian, 149; scientific hypothesis, 150; as source of morals, 198; divine intelligence, 255, 259. *See also* Mover
Gods, Greek, 147, 148; redemptive, 148; Fifty-six, of Aristotle, 157; "lesser gods" of Plato, 159
Golden mean, virtue as the, 218, 347

Good, the, concept, 197, 198, 200, 233; aim of the state, 266, 271; virtue not the, 232
Good, apparent *vs.* real, 234. *See also* Happiness: Human good
Goodness, of pleasure, 202, 206, 212; standard of human, 211
Government, forms of good, 270, 274; an aid to the individual, 275. *See also* State
Greece, opposition to Macedon, 10, 14, 15, 26
Grief, 316

Happiness, 200, 346; nature of, 201, 211; relation of pleasure to, 208; object of the state, 275
Harmony, in art, 303
Heart, 111
Heavenly bodies. *See* Spheres
Hector, 328, 329
Hedonism, Cyrenaic, 201, 204
Hephaestion, 23, 25
Hermeias, 7, 8, 9, 10, 26, 281
Hero, tragic, 320
Heroic verse, 329
Herpyllis, 20, 27
Hippodamus, 269, 277
Homer, 306, 313; quoted, 158
Honesty of rulers, 287
Honor, 201
Human good, 199. *See also* Happiness
Human nature, needs of, 214, 255; unity, 253, 256; virtues, 254
Hypotheses, 186

Idea and object, reunion of, 40
Ideal state. *See* State
Idealistic art, 306
Idealization, 306, 307
Ideas, Platonic, 35, 36, 37, 47
Ignorance, as a determinant of action, 230; responsibility for, 237
*Iliad,* 328
Images, 130
Imagination, 111, 115
Imitation, 303
Immorality, in poetry, 328
Immortality, 32, 139, 331, 342
Impossibility, in poetry, 313, 328
Improbability, in poetry, 328
Incontinence, 248, 348
Indifference, free will of, 239
Individuality in the state, 267, 275
Individuals and universals, 40, 46
Individuation, principle of, 60, 64
Induction, 181, 190
Inference, 168
Infima species, 164, 165
Infinite spatial magnitude, impossibility of, 75
Intellect. *See* Thought
Intellectual error, 122
Intellectual virtues, 216
Intelligences, 49
Intention, 228
Introduction to a speech, 300
Intuition, 184
Involuntary behavior, 228, 230, 237, 240

Justice, 225, 347

Kingship. *See* Monarchy
Knowledge, 45, 183; process of, 119; scientific, 185; of good and evil, 248, 249

Land, private ownership, 277
Language, 162; in prose style, 298
Law, relation of monarchy to, 273; obedience to, 287
*Laws* of Plato, 155, 265, 269, 281
Lawyer, art of pleading, 295, 300, 301
Leisure, virtue of, 279; lack of, in a democracy, 282
Leucippus, 68, 69, 74, 85
Life, nature of, 88. *See also* Soul
Literary style. *See* Prose style
Lively sayings, 299, 301
Locomotion, nature and kinds, 78
Logic, 162–195, 343; the categories, 163; the proposition, 167; inference, 168; the syllogism, 170, 178; premises, 172; theory of the predictables, 174, 344; fallacies, 176; induction, 181, 190; scientific

method, 185, 345; demonstration and definition, 190
Loving, 261
Lyceum, 8, 18–20, 26

Macedon, 3, 9; and Greece, 10, 14, 15, 26
Magnificence, 223
Majority rule, 282, 284
Man the culmination of animal life, 99; a political animal, 291
Marriage, regulations governing, 278
Material cause, 53, 54, 194
Matter, potentiality of, 63; no single homogeneous, 68; not corporeal, 70; functions of animate, 91
Matter and form, unity of, 47, 332; actual and potential, 52–72
Maxims, 297
Meals, common, 277
Memory, 112
Metaphor, 327
Metaphysical theory, development of, 31–51, 331; reunion of idea and object, 40; doctrine of substance, 42; unity of form and matter, 47
*Metaphysics,* 8, 30, 34, 36, 37, 44, 159, 160, 176, 198, 200, 246, 331
Metre, 329
Middle class, 283
Minority rule, 282, 285
Monarchy, 270, 278; advantages and dangers, 272; types of: relation to the law, 273; tyranny, 273, 282, 288, 289; preservation of, 288
Moral law, 196, 198
Moral philosophy, 196, 198, 201, 216, 217, 221, 254, 257; Cynic, 201, 202, 203, 214, 215, 232; Cyrenaic, 201, 204. *See also* Ethics
Moral purpose, in tragedy, 320, 323
Moral responsibility, 227
Moral tone in oratory, 300, 301
Morals, art not subservient to, 304, 305; in the epic, 328
Motion, 60; four causes of, 53, 194, 335; and time, 76; nature and kinds of locomotion, 78; celestial mechanics, 80, 156; first cause, 83, 151, 160, 335
Motion and change, nature of, 54; conditions of qualitative change, 65, 69
Mover, unmoved, as cause of motion, 84; search for, 85–117, 334; approach to, 118–140; intellect not an, 131, 339; discovery of, 141–161; relation of lesser gods to, 158; plurality, 158, 343. *See also* God
Music, in education, 279; value of, 280

Naturalism of the *Nicomachean Ethics,* 198
Naturalness, in oratory, 298
Nature, contingency in, 153; art an imitation of, 302
Necessity and chance, 154
Neleus, 28
Nicanor, 27
*Nicomachean Ethics,* 20, 30, 196, 197, 198, 236, 246, 260, 304, 317, 346, 349
Nicomachus, father of Aristotle, 3
Nicomachus, son of Aristotle, 20, 27
Non-voluntary behavior, 230
Number, in definition of time, 78
Number theory, 37

Object and idea, reunion of, 40
Objections, answering, 298
*Oedipus Tyrannus,* 321, 324, 325
Officials, government, 287
Oligarchy, 282, 285, 286, 290
Olympias, 12, 16, 23
*On Philosophy,* 8, 34, 36, 44, 47, 159, 331
Opposition of propositions, 170
Oratory, reasoning in, 294; appeals of, 296
Organic matter, functions of, 93

Parable, 297
Parallel, 297
People, type for each form of government, 274

Perception, 102, 105; awareness, 110
Perdiccas, 25
Peripatetic, 17
Persuasion, ways and means, 294; prose style, 298
*Phaedo* of Plato, 33, 140
Phaleas of Chalcedon, 269
*Philebus* of Plato, 33, 196, 197, 199, 218, 266
Philip of Macedon, 8, 9–11, 14, 15, 19
Philip of Opus, 36
Philosophic wisdom, 246
Philosophy, nature of, 44; and ethics, 198
*Philosophy. See On Philosophy*
Physics, 73–84, 335; body, space, time and motion, 74; nature and kinds of locomotion, 78; celestial mechanics, 81; first cause of motion, 83
Pindar, 218
Pity and terror, 311, 314
Place and space, 69, 73
Plato, 4, 280; life and inheritance compared with Aristotle's, 1; attitude of Aristotle towards, 5; philosophy, 31; influence upon Aristotle, 32, 331; Aristotle's liberation from, 34, 331; criticism of, 37; Aristotle differs with, about form and matter, 60, 65; rejected by Church, 149; ethics, 196, 198, 199, 218, 233, 255; attack on pleasure, criticised, 201; debt of the *Politics* to, 265; *Republic,* Aristotle's criticism of, 266, 290; contempt for rhetoric, 294; relation between art and morals, 304, 307; theory of grief, 316
Pleading, art of, 295, 300, 301
Pleasantries, 299, 301
Pleasure, need of, 201, 279; criticism of Plato's attack on, 201; what it is not, 203, 204; criticism of hedonism, 204; goodness of, 202, 206, 212; relation to happiness, 208; what it is, 208, 210; the end of art, 304, 308; through pity and terror, 317
Plot, requisites for, 312; manipulation of, 322
Plutarch, 316; on Alexander, 24
Pneuma, 90
Poet, methods: qualifications, 325
*Poetics,* 302, 308, 310, 311, 329
Poetry, 302–330; art an imitation of nature, 302; pleasure the end of art, 304; art not subservient to morals, 305; nature of tragedy, 310; the three unities, 311; plot, 312, 322; pity and terror: catharsis, 314; the tragic hero, 320; the epic: diction, 327
Political argument, 300, 301
Political theory, of Aristotle, 265–293, 349; criticism of Plato's *Republic,* 266, 290; nature of the ideal state, 269, 274, 349; forms of good government, 270, 274; monarchy, 270, 272, 282, 288, 289; happiness object of the state, 275; the life of the perfect state, 276, 281; education of an ideal citizenry, 278, 288; existing political types, 281; revolution, 286; the family the state in miniature, 290, 291
Political theory of Plato, debt of the *Politics* to, 265
Political types, 281
*Politics,* 8, 30, 34, 266, 281, 305, 331, 350; debt to Plato, 265
Polytheism, 157, 343
Population, of perfect state, 276
Possibility, in plot, 313, 328
Potentiality, the potential as material, 56; determined by actuality, 58; passing from, to actuality, 60, 332; multiple nature of, 62; nature of passive intellect, 135, 341; root of the imperfect in, 154
Practical wisdom. *See* Wisdom
Predicables, theory of, 174, 344
Preference, 113, 231
Prejudice, dissipating or exciting, 300
Premises, 179, 186; false or probable, 172
Pride, 223
Prime matter, 63

Priority of the actual, 57
Private interests, 266. *See also* Property
Proof of a case, 300, 301
Property, 292; private, 266, 268, 277
Proposition, quantity and quality, 166; inference, 168
Prose style, 294; secrets of persuasive, 298; different types, 299
Protagoras, 233
*Protrepticus,* 6, 32, 33, 34, 196, 197, 198, 199, 266, 331
Ptolemy, 82
Purgation. *See* Catharsis
Pythagoras, 218
Pythagoreans, 226
Pythias, 8, 20, 27

Quality, 163, 166
Quantity, 163, 166

Rational soul, 118
Reason, and ethics, 198, 214, 242, 255, 259; a clue to unmoved mover, 124, 337. *See also* Contemplative thought: Thought
Reason, active, superhuman nature of, 138; identified with God, 141
Reasoning, calculative, 243
Reasoning (rhetoric). *See* Persuasion
Recollection, 112
Redemptive deity, 148
Refutation, 298, 301
Religion, philosophy of, 147
Reproduction, 54, 95, 98
*Republic* of Plato, criticism of, 266, 290
Responsibility, 237
Revolution, causes and prevention of, 286
Rhetoric, 294–302; popularity of, 294; ways and means of persuasion, 295; prose style, 298
Rhetorician, definition of: object, 294; literary style, 298
Rhythm, prose, 299; in art, 303

St. Thomas Aquinas, 146
Scientific demonstration, 185, 345
Self-determination, 237
Self-love, 261, 349
Sensation, 91, 102, 115, 336; unity of, 107
Senses, 105
Sensitive soul, 91, 102, 115
Sex-determination, 96
Sexual reproduction, 95
Shakespeare, 311, 322
Slave-class, 270, 278, 292, 293
Slavery, natural, 291; as development in state, 292
Socrates, ethics, 237, 240, 247, 250
*Sophistici Elenchi,* 176
Sophists, 233
Sophocles, 322
Soul, 33, 91, 102, 115; immortality, 32, 140; nature of, 88; relation to body, 89; rational, 118
Space and place, 69, 73
Spartan government, 269, 273
Species, 165, 175
Speech (oration), divisions of a, 300
Speusippus, 4, 5, 6, 17, 37, 38, 201, 203
Spheres, 36, 152, 153, 336; character of, 59, 73; celestial mechanics, 80; aberrations of, 156. *See also* Universe
Spinoza, 148
State, purpose of, 271, 275; happiness, object of, 275; origin, 290; the family, the state in miniature, 290, 291
State, ideal, held feasible, 266; nature of, 269, 274, 349; life of, 276, 281; classes to whom government confined, 283
Statement of a case, 300
*Statesman* of Plato, 218, 265
Stinginess, 222
Style. *See* Prose style
Subject matter, of art, 305; of poetry, 310; of tragedy, 320
Substance, doctrine of, 42; category of, 163
Substratum, 66
Summum genus, 193
Surprise, 313
Syllogism, 170; forms of, 178

Temperance, 222
Terrestrial activity, 82
Terror and pity, 311, 314
Themistion, Prince, 196
Theognis, 218
Theology, 145
Theophrastus, 8, 19, 26, 27, 28, 93, 180
Thought, 118, 122; not a bodily power, 125; intellect impersonal and universal, 128; intellect not an unmoved mover, 131, 339; transition from actual to action intellect, 133, 341; distinction between active and passive intellect, 135; passive intellect perishable, 139; the divine intellect, 144; divine nature of human, 152; activities of intellect, 243. *See also* Reason
Three unities, 311
*Timaeus* of Plato, 33, 35
Time, and motion, 76
*Topics,* 29, 172, 174, 176
Tragedy, 310; defined, 311; plot, 312, 322; aim of, 315, 317; material of: hero, 320; compared with epic poetry, 328
Tyranny, 273, 282, 288, 289

Unities, three, 311
Unity of human nature, 253, 256
Universals, 40, 43, 46
Universe, 35–37, 85, 142; awareness of God, 146; imperfection of, 153. *See also* Spheres
Unmoved mover. *See* Mover
Utopias, 265, 269. *See also* State, ideal

Vegetative soul, 91
Vice, 237, 240, 251
Vices, 221
Village, the, 290
Virtue, nature of, 215; as the golden mean, 218, 347; as a mean state, 220; as a means, not an end, 232; and practical wisdom, 242
Virtues, list of, 221
Vital processes, explanation of, 97
Void, concept of the, 74
Volition, 114
Voluntary behavior, 228, 230, 237, 240

Wickedness. *See* Evil: Vice
Will, 228; freedom of, 235; and appetite, 250
Wisdom, 198, 199; philosophic, 246
Wisdom, practical, and virtue, 242; defined 244; contemplative activity *vs.,* 246, 253
Wish, 233
Women, communizing of, 266, 268
World-process, 85

Xenocrates, 4, 5, 7, 17, 37, 38
Xenophanes, 307

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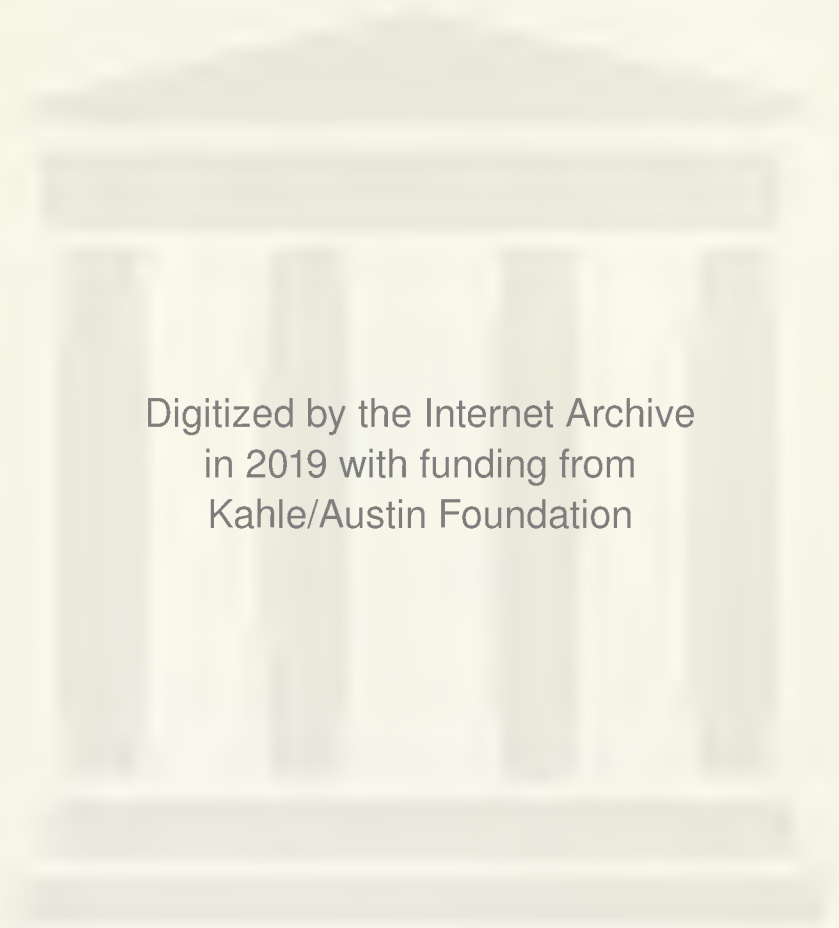

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# HISTORY OF GREEK PHILOSOPHY

# HISTORY OF GREEK PHILOSOPHY

## THE SOPHISTS
## SOCRATES
## PLATO

BY

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To Mrs. Arthur Strong, whose friendship made me at home in the library of the British School at Rome, where this book was begun.

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# CONTENTS


| CHAPTER | | PAGE |
|---|---|---|
| | Preface | ix |
| I. | The Sophists | 1 |
| II. | Socrates | 43 |
| III. | The Megarics, Cynics, and Cyrenaics | 88 |
| IV. | Plato's Life and Times | 142 |
| V. | Platonic Love | 182 |
| VI. | Plato's Ethics and Politics | 202 |
| VII. | Plato's Theory of Knowledge | 290 |
| VIII. | The Platonic Ideas | 304 |
| IX. | The Relation of the Ideas to Knowledge and Sense | 320 |
| X. | More Critical Difficulties | 343 |
| XI. | The Ideas as Mathematical Formulae | 378 |
| XII. | God and Matter | 393 |
| XIII. | Plato's Later Political Theory | 424 |
| | Chronological Table | 473 |
| | Bibliography | 481 |
| | Index | 483 |

# PREFACE

The present volume carries on the history of Greek philosophy from the point at which my book [1] on the earlier systems let it drop, and presupposes, as any study of Socrates and Plato must, an acquaintance with the essentials of Pre-Socratic thought. Like the first volume, it is written with the conviction that the history of philosophy constitutes one of the best detective stories ever written, and in the hope that I may convey something of its excitement to the general reader or, at least to one who has perhaps without knowing it a flair for philosophy and a predisposition to feel and like the "kick" in it. Then, too, I have tried once more to sugar-coat the pill, or rather the bolus, that the American undergraduate taking a "course" in the history of ancient philosophy is frequently obliged to swallow with unseemly haste. And I even dare hope that I may help sweeten the taste of those who are ruminating the Platonic cud in a more leisurely way.

In intention, and I think I may say in fact, the present book, like its predecessor, makes no new contribution to what is already known or suggested about its subject, and throws no fresh light upon anything. It does not even try to fuse and focus the various colors and the conflicting angles of incidence and reflection of the lights by which the field is already illuminated. It seeks merely to present opinion up to date without attempting to reconcile or resolve the contradictory views of different critics. It has been written, even to the point of plagiarism, out of the general histories and the more specialized discussions already available. Nor, as the references in the text and the appended bibliography will show, has its utilization of material prepared by others been thoroughgoing. I have used only works immediately or conveniently accessible.

[1] *History of Greek Philosophy, Thales to Democritus.* 1923.

But these works comprise, I hope, a fair proportion of what is standard on the subject, and I have not been so shameless in my shop-lifting as to leave the original texts unconsulted.

I am much indebted to my colleagues, Professors L. T. More, G. A. Tawney, R. K. Hack, and R. P. Casey of the University of Cincinnati, and to Professors R. B. Perry and R. M. Eaton of Harvard University, who have read portions of the book; also to my friends Mr. Howard Sagmaster, who reduced the greater part of my manuscript to legibility on the typewriter, Miss Elizabeth Woodruff, who read the first chapters, and Mrs. J. J. Whitehead, Jr., who read the manuscript almost in full. The time they so kindly placed at my disposal and the criticisms and suggestions they offered have been of great assistance in preparing the book for publication.

University of Cincinnati. B. A. G. F.

# HISTORY OF GREEK PHILOSOPHY

## CHAPTER I

## THE SOPHISTS

### I

Philosophy, like the stock-market, has its ups and downs. Now "bullish," now "bearish," it tends to swing between periods of intellectual hope and enthusiasm and constructive activity, on the one hand, and intervals of mental depression, loss of confidence in the power of reason to deal with the problems of existence, and even out and out intellectual panic, on the other. In a buoyant market the mind tends to disparage caution, to build top-heavy systems, and to bid up every professed solution of the problem of the universe to a figure far out of proportion to its earning power. But at the same time this spirit, when it inspires profound and able thinkers, leads to the establishment of the great philosophies which, surviving era after era of skepticism and critical attack, never become insolvent, but prove to be once and for all part and parcel of the permanent wealth of the intellect. In its moments of liquidation the mind tends to the other extreme. It throws over not only the speculations but the sound investments of the past, and refuses "to take stock" in any metaphysical enterprise whatsoever. Its confidence in the power of reason to deal with the nature of Reality is thoroughly pricked, and the securities regarding the unseen that every interpretation of the universe must try to float are regarded, irrespective of their real value, as so much water.

But here again, if dominated by acute and powerful critics, these "bear markets" in which confidence collapses and skepti-

cism is rampant are of great use. They correct the technical situation, deflate current dogma and pretension, and stand as a perpetual warning to constructive philosophers against over-credence and over-speculation. And they help to prepare the ground and to afford a stabler basis for the revival of system-building that is bound to follow. Moreover, just as the "bears" as well as the "bulls" make money, so, however much a skeptical attack may weaken a given system, the existence of skeptical arguments and of the skeptical position is an acquisition rather than a loss for the mind, and enriches philosophy as a whole instead of impoverishing it.

The history of Greek philosophy exhibits these alternatives. The first, highly constructive, Pre-Socratic epoch crashed in a turmoil of skepticism, religious, scientific, moral, and political, which for a time, seemingly with good reason, sold the entire universe short. Upon this there followed, however, the upward swing of the Socratic teaching, which culminated under Plato and Aristotle in perhaps the most prosperous years that philosophy has ever known. And this, again, was succeeded by another, less violent and drastic but more prolonged epoch of decline and dullness in metaphysical speculation, during which a second, determined skeptical drive was to some extent countered and kept within bounds by the moderate rallies of constructive thinking, largely along ethical lines, sponsored by the Stoics and the Epicureans. Finally, with the Neo-Pythagoreans and Neo-Platonists came a third outburst of highly speculative, metaphysical activity which, supported by the revelations of the new, Christian religion and stabilized as an inspired theology, maintained a structure of unimpaired if somewhat frozen credit for more than a thousand years.

The present volume deals for the most part with the memorable period of construction initiated by Socrates and perfected by the genius of Plato and Aristotle. But it begins, largely as a matter of convenience, with the preceding critical and destructive work of the Sophists. This philosophic débacle may equally well be regarded and treated, to be sure, as the aftermath of the Pre-Socratic era, and as the conclusion rather than the beginning of an epoch. But its bearings upon what

followed are so important and so direct that we are warranted in making it the subject of our initial chapter. Let us turn, then, to consider the sources and to trace the increasing volume and velocity of this first skeptical crash in Greek thought.

Its most potent and immediately exciting causes lay perhaps, as we shall see in a moment, outside the sphere of philosophy altogether. But some of them, and these perhaps the decisive factors, lurked in weaknesses half-hidden in the foundations of the older systems, and warning of the impending fall had been given long beforehand by the perplexities encountered, but too often ignored, as each new theory was built up. We could catch the first faint murmurs of danger in the difficulties, unwittingly disclosed by the Milesian School, of reconciling the birth and existence of a brilliant, chameleon-like world with the theory that the stuff of which all its shifting rainbow-tints were made was really of a drab and constant uniformity. This murmur became ominous when the Eleatics, following up the Milesian disclosure, denounced the evidence of the senses as wholly untrustworthy, and multiplicity, variety, and change as sheer illusions, and concluded that the world-stuff could be nothing that the world seemed to be. The dialectic, too, in whose eddies Zeno loved to confuse and confute the opponents of his master needed little to become a whirlpool in which all the philosophic achievements of a century might be sucked down.

The Heracleitean philosophy was more obviously built upon a liquid and shifting quicksand. Its very foundations were in flux, and its stability depended upon their constant repair and renewal according to the fixed formula and plan of the unchanging Logos, or law and organization that permeated and governed the world-process. But suppose that this law and order, this just balance, this constitution of things, were not immutable? Suppose that they, too, were in flux and never the same from moment to moment and place to place? Where then was there any ascertainable truth, any formula that could be applied to the world-process as a whole, any reality that was more than the dissolving show of appearances taken as they came from instant to instant?

The difficulties of the philosophic task were in some measure evident to those who made a final effort to reconcile the demands of Eleatic logic with the evidence of the senses. Both Empedocles and Anaxagoras bewail the deceptiveness of experience and the short-windedness of reason when it tries to climb by its own powers to a reality that perception conceals and falsifies. And Democritus, seeking to brace his system against the flood of skepticism which had already burst, saw the necessity of constructing a sound theory of knowledge, and endeavored to show how reason might be in contact with reality independently of the sense-organs. But, even in that case, why did the same reality impress the same reason so differently at different times—witness the changes of mind through which every thinker passed? And why did it impress reasons in so contradictory a manner—witness the disputes of the philosophers? The suspicion must persist that all these changing and warring systems were man-made and relative and took their color, not from a reality beyond experience, but from the cast at the moment of the individual mind.

Meantime from other, more mundane sources currents were flowing in to help swell the volume and the force of these skeptical questionings. Trade and travel and war had been raising the curtains of the surrounding world and revealing more intimately to the Greek the great foreign civilizations at his doors. The same influences had brought the Greek states themselves into close and irritating contact and confronted them with one another's peculiarities. And the development of her empire had opened the eyes of Athens to some of the political and social, if not to the philosophic and religious, consequences of a world in which institutions and ideals, convictions and standards, were not of all one "stock" pattern. Furthermore, although bigotry might still keep the faith and ideals of the Athenian people uncorrupted by intellectual and moral progress and unspotted by the trans-Aegean world, the "intelligentsia" surrounding Pericles had experienced the purgative and liberating influence of Ionia and Magna Græcia and of its enlightened, disillusioned, and tolerant attitude towards both God and man.

Everywhere, then, the horizons of the mind were widening upon the vast confusion of human life. In the picture that was disclosed, crowded with the countless and multiform "cities of men" and the bewildering diversities of their "manners, climates, councils, governments," it might well seem that no final or single perspective could be found. The eye sought in vain some vanishing point of agreement, be it about the nature of the world or of the Gods or of the good, towards which all this diversity of thought and action converged. It met only an irreconcilable divergence and self-contradiction in ideals, beliefs, laws, institutions, rules of conduct, and even primitive instincts. The cherished truth of one school of philosophy was the detested falsehood of its neighbor. Institutions that worked well in this city would not work at all in that. What was right here was wrong there. What offended the animal instincts of one group commended itself to those of another. *Autres pays, autres moeurs.* The correct and the incorrect, good form and bad, modesty and immodesty, virtue and vice, truth and error, were modes of behavior as local and relative as different fashions of arranging the hair or wearing—or not wearing—one's clothes. At Miletus or Lesbos, Athens might seem hopelessly priggish and provincial; to Sparta, as hopelessly lost in frivolity and decadent cosmopolitanism. The only certainty that the intelligent mind could derive with any assurance from the spectacle was the ignorant arrogance of setting up the ideals and constitution of one's own city as a fixed point of reference for estimating the inferiority of all foreign standards and institutions.

The enlightened skepticism born of a thoughtful and unprejudiced survey of contemporary human life could not but be reinforced by the new interest in history which was astir. To raise the eyes, as Herodotus was doing, from the foreground of the immediate present to the background of the past was to find confusion worse confounded. The disquieting picture of the localism of truth and morality in space was now rendered all the more unsettling by an increasing sense of their mutability in time. The fixed point of one's own superior standards, so convenient for the complacent misjudgment of others, proved

not to be fixed at all. Manners and morals, political, social, and economic organization, not only abroad but at home, were in unremitting Heracleitean flux. Right and wrong, truth and falsehood, the natural and the unnatural, the correct and the incorrect, good form and bad, had changed over and over again and were still changing.

But there were other and more immediate reasons for this growing sensitiveness to the relativity of human institutions and to the futility of judging the ideals and conduct of one time or place by that of another, which might give a sharper taste to the perception of the logical difficulties and self-contradictions of the philosopher and make more biting the suspicion that there was no way of knowing whether one system was truer than another. The onslaught of democracy in Greece had tended to establish a tyranny of the many over the few and to put the better at the mercy of the worse. It had developed that inability to stomach anything above the average, be it in wealth, brains, or ability, of which Heracleitus had complained so bitterly at Miletus. With this intolerance went a tendency to refuse sound leadership and promptly to reject expert advice. Wise counsels and superior ability might be empty and intangible things which could be converted to no democratic use. They could be merely ignored, ridiculed, or exiled, as the degree of their truth or talent might demand. But if the common people could not stomach the intangible superiorities of the aristocracy, they could at least devour and digest its property with the greatest gusto. Wealth was something positive. It could be eaten with the fingers—or if necessary with the knife—and there was no man, however ill at ease he might be made by other aristocratic traits, but felt that riches would certainly agree with him.

The growth of democracy meant then a long and bitter struggle by the poor, on the one hand, to bleed the rich either by force or by law, and, on the other, by the rich to resist by force or law such bleeding. Already in the Sixth Century B. C. this conflict had arisen and assumed grave proportions in the Ionian cities, with their plots and seditions and alternations of government by democracy and restored aristocracy, both

equally vindictive. Nor had Athens in her more tardy and perhaps more stable development escaped, or was she to escape, conspiracy and violence and interludes of oligarchy.

Meantime the Athenian democratic régime ran true to form. Everyone could now take part in the Assembly, say his say on all matters, propose measures, cast his vote, and perhaps, if he had a ready tongue, catch the votes of others. Theoretically, no better school for statesmanship could be conceived than the town-meeting of such a city, where every citizen had a direct voice and an ungloved finger in the government not only of an independent state but of a great empire. Still, neither the native Athenian brilliance and shrewdness nor the comparatively high level of popular education, nor yet the stimulus of belonging to a debating society charged with both sovereign and imperial problems and responsibilities, was sufficient to raise politically the Athenian above other democracies. In such a state, says Plato, apparently with the Athens of his day in mind, there is "no necessity for you to govern, even if you have the capacity, or to be governed, unless you like, or to go to war when the rest go to war, or to be at peace when others are at peace." Nor is there any reason "because some law forbids you to hold office or be a dicast (juryman), that you should not hold office or be a dicast, if you have a fancy," or why, although you "have been sentenced to death or exile," you should not "stay where you are, and parade like a hero." No thought is given "to the pursuits which make a statesman," but "any one who professes to be the people's friend" is promoted to honor. In short, democracy "is a charming form of government full of variety and disorder and dispersing a sort of equality to equals and unequals alike." [1]

In Athens, then, a young man who wanted to get on and make a success of his career need not be overscrupulous about right and wrong, truth and falsehood, or even common sense and hard facts. All that he needed was a bit of blarney and a flair for playing upon the weak spots in his audience. Votes were to be caught and influence obtained in the Assembly, not

[1] Plato, *Rep.*, VIII, 557 E ff. The translations from Plato throughout this volume are, unless otherwise indicated, taken from Jowett.

by a display of sound statesmanship, but by the clever use of catch phrases and oratorical appeals to passion and prejudice. In questions of domestic legislation the most efficient prejudice to arouse was naturally class hatred and local jealousies. No promise, however hollow economically, seemed so fair or bribed so many votes as that of dispossessing the rich. And anyone who wished to make his mark in matters of foreign policy doubtless had at his command helpful devices like the old American invention of twisting the British lion's tail, and could effectively silence all counsels of experience and foresight in the screechings of the owl of Athene or by waving the Gorgon's head.

The same held true of the lawcourts. Just as the town-meeting form of government made every Athenian his own Congressman, so the absence of professional lawyers forced him to appear in court as his own advocate. And juries proved to be as easily taken in by the same tricks of rhetoric as fooled the Assembly. There was always a fair chance of successfully obscuring the rights of the case by a judicious and impassioned invocation of irrelevant matter. Accuse your adversary of affecting a Doric or an Ionic accent, or of admiring Spartan efficiency or Sicilian culture. Attack his political opinions and charge him with reactionary conservatism or dangerous radicalism according as you grasped the temper of the court. Contrast the size of his bank account with the more moderate balances of the plain people from whom the jurors were drawn. Hint at improprieties in his private conduct such as his judges were successfully concealing in their own lives. Introduce a dramatic exhibit of your weeping relatives or of the piteous victims of his force or fraud, and in a voice breaking with pathos and righteous indignation blur the eye of reason with tears of sentimentality. Your suit, whatever it was about, was as good as won.

A silver tongue, however, is hung in the middle and can wag at both ends. The rich and the prominent, naturally enough, could not sit passive and silent under these attacks. Their money and perhaps their lives depended upon learning how to give the soft answer which turneth away wrath, or to launch

the bold counter-offensive which might crumple up the demagogue and discredit him, temporarily at least, with his audience. But in order to do this it behooved them to descend into the lists no less well armed with rhetoric and persuasion, no less quick of wit and tongue, no less ready to grasp and to bend the temper of their audience than were their opponents. And even sensible and patriotic men, who put the interests or the fair name of Athens above class prejudice and partisanship, must also learn the tricks of the politician's trade. The most obvious policy, the merest decency, the simplest justice, the nakedest truth, might need to be veiled with specious trappings of bombast and sentiment in order to pass the censorship of the public. The better course could be made to appear the better, only if to all outward seeming it were carefully kept indistinguishable from the worse.

Although, then, divine Reason sat enthroned in the Parthenon, and the Erinnyes dwelt enshrined in their cave in the steep of the Acropolis, it was not to the Assembly that one would have gone to see the wisdom of Athene inspiring her chosen people, or yet to the lawcourts to behold the mighty workings of that Justice which holds both the sun to his measure and men to strict accountability for their deeds. One would have come away, rather, wondering at the irrelevancy, the variableness, the inconsistency, and often the extraordinary silliness of the propositions and arguments that commended themselves to town meeting and jury as true, right, and just. There was no necessity of surveying or comparing the manners, climates, councils, governments of divers cities and different ages in order to suspect that truth and error, good and evil, justice and injustice, were relative, reversible, and interchangeable terms. To learn that lesson no one need raise his eyes higher than the colonnades of the market place or the meeting ground of the Pnyx, or compare more than the afternoon with the morning of the same day.[2]

No class, naturally, would be more impressed by these conditions than the new professional teachers that the effects of democracy upon the ideals of Greek education were rapidly

[2] *Cf.* Zimmern, *Greek Commonwealth,* pp. 165 ff.

bringing into being and prominence. The old "classical" system of instruction in art, arithmetic, poetry, and music had proved inadequate to meet the demands of a bigger, busier, and better world. New subjects like science were coming to the fore and demanding a place in any up-to-date curriculum. The question of vocational training loomed large, and technical education stated its legitimate claims and its advantages in no uncertain tone.

But the reform did not end here. The "classical" system, whatever its defects might be, had, after all, taught the humanities for the sake of the sport, the grace, the distinction, and the repose that they gave to the mind. In the new circumstances of democratic push and competition, however, the object of life lay in self-preservation, and the mind was sufficiently exercised by the struggle for existence and sufficiently reposed in the lap of material success. For the masses all the axioms of the Seven Sages were summed up in efficiency with the addition, perhaps at Athens, of a few precepts of old-fashioned piety. The result was not merely an enlargement of the scope but a revolution in the spirit of instruction. Education must be first—and last—practical in its aims. Its prime, indeed its only function was to help every young man to get on with all speed and elbow his way vigorously to the front through the crowd, no matter in what direction it happened to be facing. But of what earthly use in the crush were art, music, and an acquaintance with the poets? The effort that they exacted from the intellect did not make for immediate efficiency, and was therefore profitless. The time spent upon them was to all practical intents and purposes thrown away. The really helpful "preparation for life" was rhetoric, which trained one to deal successfully with town meetings and lawcourts and influence them to one's advantage. To such a study an ambitious youth could devote himself without feeling that his hours were uselessly employed. Rhetoric, in a word, took the same place and enjoyed the same popularity in the Athenian scheme of education as "economics" has pre-empted in American universities.

To this general demand for a business-like, practical school-

ing there was a quick response. In a state where everyone had to be his own Congressman and lawyer, and both political debate and legal argument were able to have all the acrimony and frequently the violent results of a duel, fencing-masters, as one historian of philosophy has remarked, were indispensable.[3] Just, then, as we have in America to-day our chairs of banking, our professors of the art of managing factories and railways, and our schools of business administration, so there sprang up in Greece a class of professional instructors who advertised themselves as specialists in the art of worldly wisdom and success, and promised to teach their pupils how to manage their households in the best manner and how to speak and act to their profit in matters of public concern. Some of those professors, to be sure, might have a lingering tenderness for the old humanities and still drill their scholars in outworn subjects, but the most eminent attended strictly to business.[4]

These professors, as a rule, had no fixed domicile. They wandered and taught wherever an opportunity for making a living by their instruction offered itself. Naturally, there was a greater demand for their services and a better chance of good pay in the larger towns than in the smaller. And as naturally, the more talented and energetic would gravitate towards the metropolis and the capital, where the democratic situation was most acute and the field for their activities most lucrative.

To the popular, and doubtless to their own way of thinking the incumbents, as it were, of these newly instituted chairs fell into the category of "brainy" men and were honored by the group name, already applied to philosophers, law-givers, bards, music teachers, poets, and prose writers, of Sophists or "wise ones." [5] Of such a classification they were not unworthy. To make good their promise of a sound, practical education in rhetoric they had to combine in their profession much knowledge and many functions that have been differenti-

[3] *Cf.* Gomperz. *Griechische Denker.* Vol. I, Bk. III, ch. V, § 2.

[4] *Cf.* Plato, *Protagoras,* 318. E.

[5] *Cf.* Grote, *History of Greece,* ch. LXVII. Taylor, *Varia Soeratica,* p. 161 note.

ated and localized in the more complicated structure of modern society. They must be masters of elocution and diction in order to train the voice, the delivery, and the gestures of their pupil. They must have sufficient acquaintance with literature to select suitable models for his style and eloquence. They must know, or perhaps create, the rules of grammar and logic for his guidance. They must be expert in all the subtle undercuts of persuasion and insinuation and in the knock-out blows of direct and forceful argument. But all these things were mere technique. However graceful, mellifluous, grammatical, and logical a youthful orator might be, he would make a fool of himself in the Assembly unless he knew some parliamentary law, and his silver tongue would not carry him far in the courts unless he had at least a working acquaintance with judicial procedure. It was incumbent, then, upon his trainers to have a sound knowledge of Athenian jurisprudence and constitutional law and of the workings of the political machinery. And finally, besides acting as an instructor in elocution, grammar, logic, and parliamentary procedure and as a professor of constitutional, criminal, and civil law, the Sophist must also be a mixture of practical politician, secret service agent, and newspaper reporter. He must be keenly observant and critical of men and events. He must keep an ear to the ground and be quick to anticipate and interpret every expression of the will of the people. He must be in continual touch with everything that went on behind the scenes as well as on the stage, and in fresh possession not only of the latest news of the day, but of all sorts of inside information, to put at his client's disposal.

The earlier and better representatives of this class were men not only of intellectual ability and distinction but also of upright and honest character. As time went on, however, there also sprang up in increasing numbers a smaller fry who, like the corrupt lawyer, the cheap orator, and the "crooked" boss or lobbyist of to-day, were a discredit to their profession. This cheaper crowd were concerned only with the success at all costs of their pupils and clients, and to attain it they were ready to descend to means of doubtful propriety. They were prepared to give instruction in the dirtier tricks of the trade

and the most improved methods of fooling the people, and they had little scruple about taking shady cases and silly or unjust measures and cooking them up with unsound arguments spiced with flashy oratory. Contemporary critics summed up the indictment against them in the charge that they made the worse cause appear the better and the better cause the worse.

It is to this smaller and later fry with their inferior standards that we owe much of the opprobrium which already attached to the word "Sophist" in antiquity, and makes it to-day, along with "sophistry," "sophism" and the like, a term of disparagement. A modern example of a similar prejudice arising from like reasons is to be found in the ill-repute that hangs about the epithet "politician." Historians of philosophy long accepted without question this adverse judgment of antiquity as a general indictment and condemned all Sophists, even the most eminent, without discrimination. But since Grote's famous defence of the profession [6] it has been realized that no such sweeping verdict can be passed. Modern law schools also turn out among their pupils a certain number of corrupt lawyers and judges, and among doctors there are always some quacks and malpractitioners. But we should not for that reason condemn all faculties of law and medicine as corruptors of youth, or presume that every member of the legal and medical professions was at the best a whited sepulchre. Furthermore, in contemporary evidence there is no slur upon the integrity of such men as Protagoras and Gorgias, who were at the head of their profession in Athens in the Fifth Century, and no suggestion that their characters were not held in the highest respect.

Still, it cannot be denied that from the very beginning even the best representatives of the profession aroused considerable antagonism. The Sophists were "wise ones," raised above the common herd, and even above most of the aristocracy, by virtue of their broad and thorough education, their learning, and their brilliance. This atmosphere of cleverness [7] and distinction exposed them automatically to the dislike and suspi-

[6] Grote, *op. cit., loc. cit.*

[7] *Cf.* Burnet, *Greek Philosophy, Thales to Plato,* p. 108.

cion that a democracy naturally felt for anything that had an air of superiority. But it was not only to the democracy that the distinction of the Sophists might prove irritating. Among the aristocracy, also, the quickness of wit and brilliancy of repartee which they cultivated as a business perhaps overawed the less well informed and the slower witted, and made them feel uncomfortable and at a disadvantage.

It would have been much less annoying had the more eminent Sophists been Athenian born. But the leaders of the profession came from abroad, and the irritation aroused by their cleverness was intensified by the prejudice against foreigners. That these aliens and colonials should be really superior or even equal to a true-born Athenian was, of course, unthinkable. Their cleverness must be affected and superficial, their culture tainted with decadence, their learning must include things that no honest and God-fearing man ought or would wish to know. Yet here were these "outsiders" with their quick wits and their sharp tongues, their irony, their cynicism, their suspected taint of irreligion and broad-mindedness, their fund of information and expert knowledge, collecting about themselves young Athenian manhood, inoculating it with their smoothness of tongue and subtlety of argument, immunizing it against parental admonition and control, teaching it how to get out of scrapes and into power, and generally undermining its ideals with their loose, godless, foreign point of view. Furthermore, to add insult to injury, they were charging fat fees for their instruction and advice and gathering in good Athenian drachmas.

This custom of taking money for teaching was an especially sore point, and together with the accusation of corrupting the youth, was the most serious part of the popular indictment of the Sophists. It was a novelty that ran counter to Greek tradition and shocked all parties alike. The aristocracy, which was supported by slave labor, had a fine disdain for anyone who made his living by his own efforts, and looked down upon trade as beneath the dignity of a gentleman. Social position, as in England formerly, condescended only to a very few paid

professions, but in ancient Greece medicine[8] appears to have taken the place of the church and the army and navy as a suitable source of remuneration for younger sons. To live by one's brains seemed particularly degrading to the aristocratic mind—a prejudice that still lingers, perhaps, in the scorn, not unmingled with jealousy, with which the university professor regards the prosperous coach who makes money just without the college gates. Nor should we forget that Lord Byron took Sir Walter Scott to task for writing for pay and looked upon his own first cheques from the *Edinburgh Review* as "tainted money," or that Rousseau had hard work to reconcile himself to the idea of selling his literary work.[9]

Furthermore, the sphere in which brains were being prostituted for gain lay at the very heart of public life. Hitherto, law suits and politics had been amateur sports in which the combatants themselves trained and exercised one another's powers. To consult a professional coach and pay through the nose for some new trick with which to win a case or slip a measure through town meeting did not seem like fair play and good sportsmanship. It was a bit underhand—perhaps with the same taint of dishonesty that hangs about lobbying and wire-pulling in politics to-day. In fact it was a kind of bribery, since you paid someone else for the information and persuasiveness necessary to the passing of a bill or the swaying of a jury. To be sure, everybody who could afford it had to do it. The stress of the times and the aggressiveness of the democracy could only be weathered by the best instruction and the most expert advice that money could buy. But even those who could afford to pay the price looked somewhat askance at their teachers and advisers. So, in the eyes of the aristocracy and the well-to-do the Sophists lost caste. They were not gentlemen but professional jockeys in the race for success and power and life.[10]

To those at Athens who could not pay the price the custom

[8] *Cf.* Gomperz, *op. cit., loc. cit.*

[9] *Ibid.*

[10] For a similar prejudice at Rome against the receipt of fees for pleading cases in the courts, see Grote, *op. cit.,* Part II, ch. 67.

of charging for instruction seemed even more obnoxious. What they saw was an invasion of Athens by a lot of over-smart foreigners who made a pot of money out of showing the idle rich how to hang on to their property and influence and balk the natural appetite of the starving democracy. In the eyes of the mob, then, the Sophists were hired champions and advocates of the privileged classes against the masses.[11] They were great corporation lawyers of foreign extraction, as it were, whose fees were beyond the means of the ordinary citizen, and whose superior cleverness and cunning enabled the interests that could afford to retain them always to win over the poor man in the courts and to get class legislation and measures favoring the rich through the Assembly.

Whatever its intrinsic merits might be, no philosophy launched under these auspices could be transmitted to posterity altogether without prejudice, and the teachings of Protagoras and Gorgias have suffered from the entirely irrelevant dislike in which the Sophists as a class were held. But no class were more fortunately placed for giving philosophic expressions to the tendencies of the age. Their learning and their cosmopolitanism would render them unusually sensitive to the lessons to be drawn from geography and history and politics. They were familiar with the dissensions and self-contradictions of the philosophers. And to an impersonal and abstract appreciation of the relativity of good and evil and truth and falsehood they could add the testimony of their daily practice. Not only had they their finger upon the capricious and fluctuating pulse of public opinion with its self-contradictions and self-reversals in the Ecclesia and the lawcourts, but they could cite thousands of cases of the same sort among their clients. They knew only too well how different, and often how diametrically opposed, convictions of truth and falsehood and standards of right and wrong are among members of the same state, the same party, the same committee, the same jury, the same family; how stubbornly every man clings to the dictates of his particular reason and of his particular conscience as the only truth and the only right, and lays down the law for all ac-

11 *Cf.* Taylor, *op. cit.*, I, p. 133.

cordingly; and how curiously these dictates may change in the same individual from moment to moment. Finally, they were endowed with the native scientific and philosophical interest and open-mindedness characteristic of the Ionians and Magna Græcians, and were inclined by instinct to generalize from their data and to accept without shock or prejudice any conclusion to which speculation and reasoning might lead. It was not, then, altogether a matter of chance that the Sophists should have furnished the two thinkers by whom a great philosophy was precipitated and crystallized out of self-contradictory world-stuffs and the new skeptical elements revealed by an analysis of human nature and experience.

## II

The first of these philosophers, Protagoras, was born at Abdera. The dates of his birth and death are placed by some as early as 500 B. C. and the first years of the Peloponnesian war, by others as late as 481 and 411 B. C.[12] In any case he was considerably older than his fellow townsman and philosopher, Democritus. Unlike most of the earlier thinkers he was a self-made man of humble origin. He is said to have begun life as a porter and to have invented the little cushion used by his fellow carriers for easing the loads on their backs and heads. But he learned to read and write—an uncommon accomplishment in those days for one in his walk of life—and, what is more, took to teaching reading and writing in country villages and the city streets, where his ability as a teacher soon freed him from the porter's load.[13] With success grew fame, and he rapidly came to the front in his native town. But like so many others in his profession he became a wandering star. At the age of thirty or thereabouts he left Abdera, and passed the rest of his life "on the road," peddling his wares of practical wisdom and gaining fame as well as fortune in the cities of Sicily and Magna Græcia and at Athens itself.

[12] *Cf.* Burnet, *op. cit.*, pp. 111, 112. Bodrero, *Protagora,* I, pp. 67–79. Taylor, *op. cit.*, I, p. 135 note.

[13] *Cf.* Bodrero, *op. cit.*, I, p. 70.

In the metropolis he made an immediate and brilliant hit. He attracted the attention of Pericles, and became a member of his charmed circle and a particularly close friend of the poet Euripides. He was deputed to draw up the constitution and laws for the new colony town of Thurii, a town that the philosopher-architect Hippodamus had laid out in the novel Oriental, American, rectangular fashion. And he is also said to have been made the tutor of the Periclean children.[14] Meantime his reputation and his practice as a Sophist grew apace, and he was able to charge for his instruction as much as $2000 per pupil. At this rate he rapidly amassed a large fortune, which in its turn helped solidify the great position that his talents, his brilliance, and his relation with the Periclean circle had won him in the city. In spite of his high fees, his lectures on rhetoric, grammar, style, and literature were crowded, and he gathered about himself many disciples and imitators who dissiminated and "boomed" the new, much-discussed "Protagoras" method in education, and made their master's name a by-word in the Greek world. Indeed, he received the highest honor short of exile or death in the gift of the Athenian people; he was mentioned and ridiculed by the comic poets.[15]

It is an open question whether he did not in the end also receive the martyr's crown. We know that his stay at Athens was broken by sojourns in his native town and by journeys which took him as far as Sicily.[16] And the story is that his last voyage was one of flight. During the oligarchic episode of the Four Hundred, it is said, he was accused of impiety by an informer present at a reading of his work, *On the Gods,* that he gave in the house of the poet Euripides. Brought to trial, condemned, and confronted with the choice of death or exile, he set sail once more for the more liberal atmosphere of Sicily, but was shipwrecked and drowned on the way. (Circ. 410 B. C.) His works, the story adds, were requisitioned from those who had bought them, and were burned by order in the market place. This tradition has been accepted in its main outlines

14 Plutarch, *Pericles,* 36, *Cons. ad Apoll.,* 33.
15 Aristophanes, *Clouds,* 112 ff., 658 ff.
16 Plato, *Hippias Maj. Mai,* 282 E.

by many modern historians. By some, however, it has been challenged and rejected, who call Plato to witness both that Protagoras was never tried at all but died in good odor during the first years of the Peloponnesian War (circ. 430), and that his works were extant and read long after his death.[17]

But whether none or all of his works, or only his treatise *On the Gods*,[18] were suppressed, the fact remains that out of five books considered authentic and some fifteen of doubtful authenticity[19] scarcely more than a dozen fragmentary quotations have come down to us. Of these there are only a few scattered words and two short passages to give us any direct introduction to Protagoras' philosophic views. But both the latter are enlightening and have become famous.

The first that we shall consider has to do with his religious views, and occurs in the treatise *On the Gods* which is said to have given so much offense. "With regard to the Gods," it runs, "I cannot feel sure that they are, or that they are not, nor what they are like in figure, for there are many things that hinder sure knowledge, the obscurity of the subject and the shortness of human life."[20] At first reading it would seem as if the pious informer at the recital in the house of Euripides had some reason for running to the authorities, and the fragment is commonly regarded as irreligious in the tone and prejudicial to sound principles in the Athenian young. There can be no doubt that it evinces an agnostic attitude towards ultimate religious and philosophical problems, for it is quite in keeping with the spirit, and perhaps, if only we could recover it, with the letter of the passage to add that the various "realities," and "world-stuffs" of the philosophers must, so far as the obscurity of the subject and the shortness of human life are concerned, be placed in the same class with the Gods. Still, it has been pointed out that there was really nothing in this agnosticism to warrant an accusation of im-

[17] *Cf.* Burnet, *op. cit.*, pp. 112–113. Taylor, *op. cit.*, I, p. 136 note.
[18] *Cf.* Bodrero, *op. cit.*, I, p. 77.
[19] Diels, *Frag. Vorsoerat*, 74 B., Vol. II, pp. 228 *et seq.*
[20] Trans. Burnet, *op. cit.*, p. 117.

piety or to shock the religious sense of the Greeks. The existence of the Gods was not denied; it was merely left to the theologians to settle, and removed from the sphere of controversial and unprofitable argument which wastes the time of the practical business man. Indeed, instead of being an attack on the deities worshipped by the city, it might easily be part of a recommendation to cling in case of doubt to the creed of the established church.[21] To-day, for instance, in similar circumstances we find the inability of reason to confirm any faith whatsoever urged as a reason for accepting the Christian.

The fragment, then, does not convict Protagoras of a bold or dangerous skepticism, or for that matter of any philosophic views at all. However, in another, and indeed the only other considerable passage in our possession he apparently both gives the gist of his own philosophical position and brings to a sharp and final focus that growing sense of the relativity and instability of human institutions, standards, and beliefs, the various aspects of which we have been noting. "Man," he states, "is the measure of all things, of things that are that they are, and of things that are not that they are not."[22] Take, he would seem to say, the spectacle of human life in all its aspects, with its shifting and conflicting ideals and convictions. Is not the invincible stubbornness of its confusion and distraction due perhaps to the fact that truth and being and reality are really just as provisional and insecure and fragmentary as they seem to be? Is there even at the foundation of the universe any such thing as so-called absolute truth, one and the same for all individuals in all places and all times? Or if there were such a truth, could we ever know whether it existed or not, or what it was?

For reflect a little. The only world with which the individual is immediately acquainted is the world of his own experience. His sensations are the stuff or reality of which this world is composed. His mind has nothing to think and reason about except what he perceives. What appears to him to be

[21] *Cf.* Burnet, *op. cit.*, I, p. 117. *Cf.* Gomperz, *op. cit.*, I, ch. IV, § 4.
[22] Diels, 74 B, 1 (trans. Burnet, *op. cit.*, p. 114).

real *is* real for him; what he feels to be true of his sensations *is* true so far as he is concerned.

But on the unreliability of the senses there was no need to insist. Parmenides had maintained that the whole sensible world was all false opinion and illusion, and Empedocles, Anaxagoras, and Democritus were at one in declaring that things are not what they seem. Also Parmenides' great opposite, Heracleitus, although he felt that the flux presented by sense-experience was real, had pointed out that it was an unstable, changing reality so fluid and so slippery that we could never say that we had twice perceived the same being. Protagoras, if the account of his doctrine given in the *Theaetetus* be a plain statement of what he himself taught, and not a Platonic gloss, elaborated the Heracleitean doctrine as a basis for his skepticism.[23] Everything was in flux, including the sense-organs. But there were all sorts of motion, and this diversity of movement accounted for the different senses and for the variety of the objects they present to our experience. In the course of the universal flow motions got to jostling one another. When they collided, sensation arose in the organ, and at the same time its Siamese twin, a so-called "external" object, appeared, seemingly endowed with the qualities perceived. But the moment the contact was over and the colliding movements sheered off and went their several ways, the qualities that made up the perceived object ceased to exist simultaneously with the disappearance of the sensations that had been taking place in the sense-organs. The tree, for example, was itself no longer green and rough and hard when the eye was shut to its greenness and the finger numbed to its solidity. Nay, more, the object could not be said to persist even as a tangle of motions that no longer happened to impinge upon the eye or ear and to arouse experience of quality. For the original movements, whose passing contact generated the flash of sense and the spot of responsive color, had themselves changed and passed out of their old being and become new and different eddies in a new and different movement of the stream of ceaseless Becom-

[23] *Cf.* also Zeller, *Pre-Socratic Philosophy,* II, p. 446, etc. Bodrero, *op. cit.,* I, pp. 228–29.

ing. What one felt, then, to be true of the world of one's perceptions must necessarily be a very unstable and relative and private affair.

These considerations disposed also of the argument, which some philosophers had tried to establish, that there existed beyond the whirl and confusion of experience a stable, external reality reached by the eye, not of sense, but of reason. Parmenides, though he had cast aside the whole sensible world as sheer illusion, had talked about "pure being," whose nature was accessible to thought alone. Melissus had hinted at "things as they are," which we neither see nor know. Leucippus and Democritus had said that the world-stuff possessed none of the secondary qualities, like color, sound, smell, taste, etc., which the things composed of it seemed to possess. But would such a reality bear a closer inspection? Terms like "pure being" and "things as they are" are fine enough phrases, but they turn out to be wind-bags, deflatable by a pin prick. Empty them of their stuffing of sense-experience and they collapse. What meaning or character or existence has a "thing," excepting so far as it is something falling within the range of somebody's perception? That which never entered anyone's head and fell outside of everybody's experience could not be called any "thing," or have any kind of existence attributed to it.[24] As for "things as they are," what *are* they, except what they appear to be? Anything more than what they appear to be falls again outside of the reach of all perception into blank no-thingness. Being, then, and reality, in the only logical sense which we can give to the terms, mean appearing and being real to some individual. Man is the measure of all things. The range of his perceptions is the limit of everything that can have any real existence for him. The changing experience of each individual bounds and constitutes his particular universe, and what he feels to be true of that experience *is* true so long as he feels it to be so, but no longer.

But if no external and enduring truth and reality can be found as a standard and measure for correcting human estimates, or for comparing and appraising the perceptions and

[24] *Cf.* Diels, 74 A, 16.

beliefs of different individuals, certainly the sense-data, the logical conclusions, and the truth of any one person or group of persons can in no wise be set up as authoritative for another. It is a presumptuous tyranny on your part, for example, to call me color-blind because what I see as green you see as red and therefore call *really* red. I have a perfect right to retort that it is you who are defective because you will persist in calling something red which is *really* green. To be sure, you seem to have the majority with you. But how can you know what anybody else's sensation really is when he talks about red, and how therefore can you be certain that there is any real consensus of perception at all? As a matter of fact it is doubtful whether anyone else sees red, or feels any sensation or value, exactly as you feel it. You can have interminable and fruitless discussions with any by stander as to whether blood is red or purple; the fountain, warm or cold; the sun, a god or a fiery stone; the world-substance, Fire or Water, Becoming or Being, One of Many; and you will find your adversary as sincere and convinced, and as aglow with the feeling of the reality of his experience and the truth of his views, as you are. The only thing that emerges clearly from such a discussion is that there are two sides to every question, and that every argument may be opposed by another equally weighted with conviction and logic and truth.[25] In a democracy, of course, the tyranny and *force majeure* of the majority may make an arbitrary distinction between fact and fancy, normal and abnormal sensation, and lay down the law that what the minority sees as green is really red. Or it may enact it as a universal truth that the sun is really a god, or the moon really made of green cheese. The universe, however, is not democratic but anarchic in its constitution. Philosophy is no respecter of persons or of chance and changing majorities, and in its eyes the sensations of all men are equally real, and what seems true to one man is as absolutely true as that which seems true to another.

Now, if the individual is the measure of all things he should set the standard not only of what is true but also of what is

[25] *Cf.* Diels, 74 A, 20 (Clem. Str. VI 65 [II 461 14 St.] Seneca *Ep.* 88, 43).

good. What seems right or wrong to him *is* right and wrong for him, and there can be none to say him nay. Universal and authoritative standards of conduct no more exist than do universal and authoritative scientific hypotheses or philosophical systems. No one person or group of persons can find any warrant in reason or precedent in the constitution of the universe for laying down the moral law to another. Every man is as entitled to his own ideas of right and wrong as he is to his own views of what is true and false. And he has an inalienable right to translate those ideas into action, to behave as he sees fit, and to account to nobody but himself for his acts. Even the few genial, Rabelaisian articles of the constitution of the delightful kingdom of the good king Pausole, where beauty perforce went unadorned and the naked truth was not constrained to live at the bottom of a well—articles that may be Englished as "Do nothing to spoil your neighbor's fun and everything else you please" would be too grim and prohibitive for a thoroughly relativistic ethics. For after all, if it *seems* right to me to knock you on the head, it *is* right for me to do so. Conversely it is equally right for you to stab me in the dark if it so please you. The crossing blades of our conflicting rights and goods are all made of the same true steel. None is inferior to another or can be broken by another. But they can be bent by vulgar weight of numbers. The weaker wrists —the minorities, which the majority call color-blind, or eccentric, or insane, or geniuses—may be forced to succumb and sheathe their blades either in outward conformity or in a prison or a madhouse.

To transfer, then, as we logically should, the doctrine that the individual man is the measure of all things from the realm of theory to the sphere of practice, and to apply it to the conduct and social relations of the individual, is to plunge society into moral anarchy. Human conduct becomes as fundamentally erratic and unpredictable as the behavior of natural phenomena. Such agreement and authority as we read into the moral order is no less a chance and hand-to-mouth affair than the stability that we attribute to the physical world, and it carries with it as little certainty of the morrow. To act

as if there were as many truths and rights as there are individuals, and as if the world-process and the moral order were liable to reverse themselves or go off at a tangent at any moment, is completely to paralyze the carrying on of human life.

It is not surprising, therefore, to find that most skeptical philosophers have sought to show that their conclusions still permit man to assume for all practical purposes a uniform and reliable external world and a universal and authoritative code of moral conduct. For example, the later Greco-Roman skeptics, while insisting that nothing could be actually known about the nature of the world-process or the character of the good, developed a supplementary doctrine of probability, which inculcated a decent respect for the opinions of mankind as probably the best guide to conduct, and for the behavior of nature in the past as probably the most reliable clue to her behavior in the future. So, too, in modern times Hume blunted the sharp edge of his doubt whether any substance or law and order of causation could be found in things, by restating the doctrine of probability and writing history as if human nature were uniform and every human act the necessary, inevitable, and predictable consequence of predetermining causes.

Did then Protagoras himself avoid the extreme consequences of his dictum that the individual is the measure of all things, and if so, how did he do it? To answer the first half of the question is not difficult. Had Protagoras preached or practiced moral and social anarchy, or even suggested that there was no good reason for expecting the sun to rise tomorrow, we should certainly have heard about it from his enemies. Moreover such a doctrine would have been wholly inconsistent with his pretensions as a teacher. Would-be boxers or fencers do not as a rule flock for instruction to a master whose fundamental idea is that there is absolutely no science of the sport and therefore nothing to be taught or learned about it. Nor would a young man eager to succeed in life pay large fees for the information that all individuals were so different and variable that nothing could be inferred or pre-

dicted of their behavior, and that life was such a gamble that it really made no difference which horse he backed.

To set oneself up, then, as an instructor in worldly wisdom and success presupposed an almost mechanical view of the regularity and uniformity of human nature and of the calculability of human reactions in given circumstances. To all practical intents and purposes, Protagoras must think life was a fixed game with set rules. These rules, he might say, were not dictated by the nature of the ground, which was absolutely flat and featureless and neutral so far as he could see. A team made up of Centaurs or Hyperboreans with quite a different set of senses and interests from our own might mark out the same field in quite another way and play on it a totally different game. But, he must have added, for human beings the human arrangement of the world-ground and of the way of playing was authoritative, and local variations of convention were of no account and easily mastered. There was most emphatically a science to the game which could be taught and a method which could be worked out for training the players. So far as we can judge from his illustration of the winning plays in his own career, that science and that method insisted on a great respect for the authority of social usage, vested interests, and the privileged classes.

We need not, therefore, be surprised to find that Plato, in spite of his dislike of Protagoras' philosophy, paints the man himself as ultra respectable and conservative,[26] and even adds, perhaps with malice aforethought, a touch of pompousness such as is more apt to characterize a pillar than a destroyer of the established order. Furthermore, he puts into Protagoras' mouth a long argument that virtue can be taught, as well as an edifying account of the necessary evolution and the firm practical foundations of a moral order, in which great stress is laid upon the universal validity of reverence and justice, and upon the authority of the majority in determining and enforcing the right.[27]

But if we may take it for granted that Protagoras never made any disturbing moral and social applications of his

[26] *Cf.* Meno, 91 D. E. [27] *Cf.* Plato, *Protagoras*—especially 321–324.

theory, we have still to ask how he reconciled his practical conservatism with the doctrine that the individual is the measure of all things? The reply to this question is more open to debate and has suggested a variety of answers. The modern school of pragmatists, for instance, have hailed Protagoras as their forerunner in the wilderness and credited him with their method of constructing an objective truth and right. Starting, they say, with as many worlds and truths and rights as there are individuals, he compounded out of them, by applying the test of utility and practical success, a single universe shared by all men in common and a truth and right valid for all. His public world and universal right and truth were built up by a process of natural selection out of those private experiences and judgments and ideas which most individuals found, as a matter of fact, to be a successful meeting-ground and market-place for discussion and concerted action, and which they therefore seemed to one another to share in common.[28]

A somewhat similar solution is offered in the suggestion that the normal, healthy individual was set up as the measure of all things, and that what seemed true to him was to be regarded as at any rate better, if not truer, than what seemed true to an unhealthy and eccentric person. Thus the world of the color-blind individual is true for him, but it is not so good a world as that of the man of normal vision. Indeed, since in some respects the color-blind cannot be safely entrusted with the business of every-day life, their way of seeing things is a great disadvantage to them. The teaching of virtue, then, is just the attempt to make everyone see with the eye of the normal man, and "it is the business of the Sophist to make the better statement which may be the weaker in a given case, not only better but stronger." [29]

Another more radical and perhaps less easily defended view is that Protagoras, when he spoke of man as the measure of all things, did not mean the individual man at all but mankind as a whole. It never occurred to him, so the argument runs,

[28] *Cf.* Schiller, *Studies in Humanism,* II, ch. XIV.

[29] Burnet, *op. cit.,* pp. 116–117.

that there are as many truths and rights as there are individuals. He merely meant to point out that the way in which the world appears to the human mind is determined by the kind of sense-organs with which human beings are endowed, and that the only truths of which we can have any cognizance are those suggested by our perceptions and capable of verification by an appeal to our sense-data. And this he endeavored to prove, not in a skeptical and destructive spirit, but rather as a protest against the philosophic fashion, followed for example by the Eleatics, of attributing to reason a miraculous faculty of knowing things that we do not perceive, and of constructing out of pure logic theories about Reality that absolutely contradict and nullify the evidence of the senses. In a word, according to this view Protagoras was not so much a Skeptic as the first champion of the experimental and inductive method in philosophy of which John Stuart Mill was so notable and ardent an expounder some fifty years ago. He was really tilting against the same *a priori* and deductive methods of "pure" reasoning as prevailed again in the earlier part of the Nineteenth Century, and his famous dictum is no more than an assertion of the modern empirical doctrine that even the seemingly most absolute and universal truths, like those of mathematics for instance, are not directly revealed to reason independent of perception, but are simply refined products of the data ground out by our particular type of sense-organs, and therefore hold good only for human experience and have no application or validity outside it.[30]

In the midst of these difficulties and differences of interpretation two points afford us a fairly sure foothold, and we shall do well in reviewing Protagoras to pause and bear some weight on them. In the first place, let us keep in mind that Protagoras himself never saw any harm or danger to morals and the public welfare in his doctrine of man as the measure of all things. Far from inferring from it that there were no authoritative standards of conduct and social institutions, he was a great stickler for the proprieties and a champion of the conventions, with a

[30] For an exposition of this view *cf.* Gomperz, *op. cit.*, Vol. I, Bk. III, ch. V, § 5. For a criticism *cf.* Burnet, *op. cit.*, pp. 115–116.

profound respect for everything that was "established." And the art of virtue, or of getting on in the world, lay in his eyes, not in violently combating, but in accurately gauging the social and moral prejudices of the crowd, and in peacefully and tactfully winding one's way through them towards the accomplishment of the business in hand. Such a view may inculcate opportunism but it does not incite to anarchy.

Secondly, let us remember that Protagoras was utterly skeptical regarding the results of philosophy up to date. All philosophies, he saw, gave the lie to one another, apparently with equal truth. Every argument about so-called Reality could be countered with an opposite no less convincing. The faculty of reason, in spite of its vaunted direct and public access to the truth, turned out to be a far greater and clumsier liar than the much maligned senses. Perception, to be sure, gave a hopelessly false picture of any external world that might exist, but it gave at least a consistent one. Its lies were self-confessed, honest, and straightforward. It always told the same story and did not contradict itself with every other word, as did the Babel of logical reasoning and philosophizing. Philosophic speculation, then, did not correct but only intensified the errors of the senses. If anything, sense-data, being the more sober, restrained the vagaries of theorizing and pulled man back to the only realities that mattered and with which he could have any acquaintance. Thus Protagoras helped force to the front the question of the nature, object, and validity of knowledge, and made of it a problem that henceforth no thinker could avoid or slight.

## III

The other great philosophic Sophist, Gorgias, was a native of Leontini in Sicily. He was born early in the Fifth Century, and is said to have been at one time a disciple of Empedocles. Like Protagoras he devoted himself to the study and teaching of eloquence. But he made no pretense to teach virtue, and indeed seems to have felt that oratory gained its objects more easily by seducing the senses and exciting the emotions and the

fancy than by attempting to convince the reason. To this end, and also doubtless with a sensitiveness to the use of speech as a fine art to be cultivated and enjoyed for its own sake, he developed a style quite different from the dry, argumentative and legal parlance of his older "colleague." It was intricate and flowery, caressing the ear with its music of sound and rhythm and flattering the imagination with its subtleties, *double-ententes*, and highly colored figures. Frequently, indeed, these exploitations of the possibilities of language were so forced as to call down upon him the censure and the ridicule of the ancient critics. And in modern times he has been cited as a precursor of the exaggerated and baroque prose in vogue in the Renaissance, the English variety of which is known as Euphuism. But he grew and flowered and flourished exceedingly in the exuberant climate and nature of Sicily.

Gorgias' advent at Athens was a link in the chain of disastrous Sicilian adventures that so handicapped Athens during the Peloponnesian War and helped so largely to destroy her power. Before the war broke out she had already concluded an alliance with Leontini, which served the double purpose of giving the Empire a foothold in Sicily and securing Leontini against the growing power of Syracuse only twenty-two miles away. But no sooner had the final break between Sparta and Athens occurred than hostilities began between the two Sicilian cities, and by the year 427 B. C. things had gone so badly with Leontini and the other towns leagued with her against Syracuse that it became necessary to appeal to Athens for help. In these circumstances what better spokesman could they choose to preside over their embassy than their brilliant and eloquent compatriot, the Sophist Gorgias, who was already a man of ripe age and experience and established reputation as a speaker?

So it came about that late in the summer of 427 the mission arrived in Athens and Gorgias made the plea which confirmed his fame in the Capital. His persuasive periods were doubtless reinforced by the fact that it was greatly to the interest of the Athenians to prevent the export of wheat from Sicily to the Peloponnesus and to forestall the probable intervention

in the war of pro-Corinthian Syracuse, whose active hostility would block the Straits of Messina and close the Tyrrhenian Sea to the Imperial fleet.[31] However that may be, his eloquence won the day and the needed help was sent, though, as it turned out, to no permanently good result. Gorgias, once having got the taste of Athens, returned within a year or two. And there he spent most of the remaining years of his life, teaching his new Sicilian style of passionate oratory and delivering, not only in his new home but at the Olympic Games and the Delphic festivals, the golden speeches that made his name, like that of Protagoras, pan-Hellenic. In his old age, however, he retired to the court of Jason of Pherae in Thessaly, where he died, it is said, when he was more than a hundred years old.

But Gorgias was more than a successful teacher and practitioner of silver-tongued oratory. He had a great and statesmanlike vision of pan-Hellenism, and exhorted his audiences to forget their differences and cease from their quarrels and to oppose a united Greece to the barbarian world. And he was also, we are told, keenly interested in ethics and physical science. But his treatment of ethics seems to have taken the form of an enumeration and discussion of the various virtues appropriate to the different stations and stages of life, with no attempt to find any single principle underlying moral action or to construct a theory of the good.[32] And we have no record of his views on science save a critical reference to his explanation of certain optical phenomena of reflection,[33] and a statement that he shared the view of Empedocles that perception is caused by the effluences of bodies fitting into and passing through the passages of the sense organs.[34]

When, however, he came to discuss the speculations and hypotheses of preceding and contemporary philosophy, he showed himself no less skeptical and critical than Protagoras. In a treatise to which he gave, perhaps with a certain malice aforethought, the title of *On Nature or the Non-Existent,* he

[31] *Cf.* Holm, *History of Greece,* Eng. trans., II, ch. XXVII, pp. 446–447.

[32] *Cf.* Plato, *Meno,* 71 E ff.

[33] Diels, 76 B, 5.

[34] Plato, *Meno,* 76 C. D.

delivered a formidable attack on the general philosophic pretension to deal with a reality underlying phenomena, and chose as his immediate objection the Eleatic salient of this position.

His onslaught was launched in three successive waves. The first phase began with a barrage of highly explosive and terrifying but not very fatal logical subtleties, the purpose of which was to show that the ability to make the statement "there *is* nothing," or "nothing exists," implies either that Being does not exist, or else that, since nothing and Being are identical, Reality is the same as nothing. Immediately behind this barrage the argument was advanced that, although logic demands that Being or Reality must be either one or many, created or uncreated, finite or infinite in time and space, or must combine these contradictory qualities, logic also proves no less conclusively that Reality cannot be one and that it cannot be many, that it cannot be finite and created, and that it cannot be infinite and uncreated, and certainly that it cannot be both.[35] The world-stuff cannot be one, for example, since whatever is one must be conceived as quantitative, or solid, or continuous; and whatever is quantitative, or solid, or continuous must be conceived as divisible and therefore composed of *many* parts. But on the other hand, each of these ultimate parts must be conceived as an indivisible unit, and hence the Many depend for their existence upon the One, and Reality cannot be many.

When it came to the question of the finitude or infinity of Reality, Gorgias could have allowed the Eleatics to destroy one another. For had not Parmenides demonstrated that Reality must be, not boundless, but a self-contained sphere, and had not Melissus proved in his turn that Reality must on the contrary be boundless since it has no beginning in time? And to cap the climax had not Zeno gone on to show again that boundlessness is a logically impossible concept? Gorgias, however, uses his own arguments, reinforced perhaps by some taken from Zeno.[36] To say, as Melissus does, that Reality is infinite in time and space is, he points out, equivalent to saying that it does not exist in space or in time, since there will be no

[35] *Cf.* Diels, 76 B, 3, 552–553.

[36] *Cf.* Gomperz, *op. cit.*, Vol. I, Bk. III, ch. VII, §§ 2, 3.

space or "where" outside it for it to exist in and no overlapping duration to contain it. And to say that a thing exists nowhere and at no time is merely a polite way of saying that it does not exist at all. But to argue that the world-stuff is self-contained and sets its own beginning and end in space and time is absurd, for that is to confuse body with the space that it occupies and the time in which it occurs, and is to do away with the distinction, by this time fully recognized, between the spatial and temporal aspects of the universe, on the one hand, and the solid and material, on the other. If, however, Reality is neither one nor many, created nor uncreated, bounded nor boundless, what is it? It certainly has lost every vestige of existence and has been reduced to nothing.[37]

Supposing, nevertheless, that in spite of the reduction of the Eleatic position philosophy still clung to its assertion that a reality did exist behind phenomena, Gorgias was prepared for the eventuality. Granted, he said, that your Reality exists, how can you ever know what it is like? To point out that things as they appeared to the senses were not things as they existed in themselves was unnecessary. The falsifications of perception were too notorious for that. But how about things as they appeared to thought and reason? Were they any nearer the real things? By no means. In the first place there is no necessary implication in thought that its objects exist, witness the fact that our ability to think about chariot-races on the surface of the sea does not imply that such races actually take place. Again, we can conceive of all sorts of unreal and non-existent beings like Scylla and the Chimera. It is no use to appeal to the evidence of the senses at this point, and to argue that Chimeras are unreal because, although we can conceive them, we do not meet with them as a matter of perceptible fact. That would be as foolish and beside the point as to maintain that a sound is unreal because it is not seen by the eye, or that sights are non-existent because they are unperceived by the ear.[38] Moreover, he might have added, had not Parmenides and Melissus both insisted that it was just the things of sense and the matters of fact that were chimerical

[37] *Cf.* Gomperz, *op. cit., loc. cit.* [38] Diels, 76 B, 554.

and illusory, and that Reality escaped the senses and was perceptible to thought and logical conception alone? [39]

The tables, therefore, were neatly turned on the Eleatics. If things always appear to thought as they are, then in reality, behind the scenes of sense, Chimeras must be breathing true metaphysical fire and chariots must be churning the foam of magic seas. For we can conceive these things quite as easily as we can Eleatic Being. But in that case the world-ground becomes a veritable "fairy-land forlorn" and Reality is a myth. If, however, there are in reality no Chimeras and no Scyllas, we must confess that we can conceive the non-existent as well as the existent, and that thinking is essentially no safer a guide to the nature of Reality than perceiving. Some of our ideas may be true for all we know, but what is to tell us when we are in touch with things as they really are and when we are merely fondling Chimeras? For certainly reason and logic in themselves possess no touchstone for distinguishing the concepts that represent Reality from those that reflect our fancies.

Finally, to overcome any scattered remnants of final resistance Gorgias had his third argument. Leaving to one side the impossibility of knowing Reality and the self-contradictions involved in the very idea of its existence, there remained the insuperable difficulty of communicating to others any knowledge that we might have of it. Suppose, for example, I actually see and taste Reality, and wish to tell you what it is like. How can I do so? Words are my only means of communication. But words obviously are not the reality that I am trying to transfer to your mind. They are merely noises. But how can I, by making a noise, insert into your mind a reality that is not a noise—like a color or a sweet flavor, for example. In short, it is impossible to pass anything but words from one mind to another, and hence a reality that is not a word but a sight or a taste cannot be communicated.

It is of no avail to argue that words are a sort of composite reality made up of the sense-data that they represent. For in that case they certainly do not resemble the realities of

[39] *Cf.* Gomperz, *op. cit., loc. cit.*

which they are composed, and are particularly unlike visible bodies. The heard reality "red," for instance, is quite unlike the seen reality "red." Moreover, the spoken word, even though it be composed of sights, is perceived only by the ear, whereas it takes an eye to do the seeing. Once more, then, how can a sound transfer a sight from me to you? How can words convey my vision of the truth.[40]

The mechanism of this argument may seem to us clumsy and antiquated, but it has a longer range and a greater effectiveness than would appear at first sight. It has not, indeed, held up the advance of philosophy, but it cannot be altogether silenced, even by such modern psychological artillery as the doctrines of the association of ideas and the symbolism of language, with which we seek to defend the possibility of communicating experience and knowledge from individual to individual. For Gorgias might have taken a leaf from the book of Protagoras and asked how we can ever be sure that a word is associated with the same sense-data or ideas in the mind of one individual as it is in another. If I utter the sound "red," for example, I convey to the mind of a color-blind person a sensation quite different from that in my own consciousness. If we talk about yonder "house" or "tree" or "cow," I have no means of knowing whether the picture before your eyes is similar to that before mine. And what teacher of any subject is ever quite sure that by his lectures he has succeeded in reproducing his ideas in the heads of his pupils? Indeed, could he open up their brains and "listen in" upon their thoughts, how strangely unlike his concepts his words would sound to him! But we cannot get inside the experience of other individuals and directly perceive and compare the sense-data associated with the same word in their several minds. For that matter, we cannot even be sure that the word itself sounds the same to them as it does to us, or to you as it does to me, since we can only hear it, each with his own ears.

As we have said, a position defended by this argument cannot be reduced. We never can be certain that two individuals are having the same sensations, images, and thoughts, even

[40] *Cf.* Diels, 76 B. 3, 554, 555.

when they are using the same words to express their experiences. All that we can do is to point out that words do not need to call up the same picture in order to stand for the same thing in different minds and convey knowledge from one to another. They need only stand for and suggest similar points of reference and ways of behavior with respect to the experience in question. Thus the sound "red," though it is associated with very different visual sensations in color-blind and normal persons, seems to occur in the minds of both alike in similar circumstances, and to occupy a like position in such clumps of experience as blood, or socialistic neckties, or rags that anger bulls. Again, when we discuss a motor-car or a locomotive together, we can neither of us be sure that the one is seeing either the whole mechanism or any of its parts just as the other sees it; but as we enumerate its constituents we agree upon their functions and positions with regard to one another, and, therefore, upon their names. And the whole, again, suggests to both of us something that is *treated*, even if it is not *seen*, in the same manner, and that therefore can be symbolized by the same word.

Gorgias' other two arguments, also, whatever we may think of their cogency, at least unmask important weaknesses in the work of all philosophic construction, which have never been repaired, and which have served again and again as points of assault for skeptical thinkers. His first argument, for instance, cannot but remind us of the objections urged by Berkeley against the concept of a physical matter existing behind sense-phenomena, or of the criticisms developed by Locke and Hume of the notion of "substance" as something more than and different from the sum of its sensible qualities.[41] And Kant, it will be remembered, found the contradictions of finitude and infinity in space and time, of unity and plurality, and of causation and self-determination, so hopeless that he made of them mere subjective peculiarities in our mental machinery, and proclaimed that they had no application to Reality, which was unknowable and indescribable in any of the ideas and categories at the disposal of the human intelligence.

[41] *Cf.* Grote, *op. cit.*, Vol. VIII, Part II, ch. LXVII.

Like Protagoras, Gorgias never seems to have extended his attack to include morals or even the experimental sciences. As we have seen, he conducted experiments in optics, and still clung to at least some of the psychology of Empedocles, even after he had become wholly skeptical as to the pretensions of all philosophical systems. Nor is there any evidence to show that his ethical teaching was ever considered in any way unsettling or subversive or radical. Virtue and vice, indeed, might be "relative to the actions and ages of each of us in all that we do,"[42] but the lesson that he appears to have deduced was the highly anti-revolutionary and edifying conclusion that everyone should perform the duties of that station in life to which it had pleased the Gods to call him, without aspiring to interfere in the affairs of his betters. A man, for example, has his particular place or virtue, and a woman hers.[43] Such a doctrine, indeed, foreshadows the Platonic view that in a virtuous state every man will find his own level and stick to the job for which he is fitted, and that the root of all political evil is unwillingness to stop where one belongs.

## IV

Protagoras and Gorgias, then, had contented themselves with demolishing the Realities and world-grounds constructed behind the world of sense-perception by *a priori* methods of pure reasoning, and had urged their main objections against the Eleatic School. They had made, nevertheless, a breach in the general notion of truth and order and system in things which might render impossible the rational defense of any position whatsoever, and they had left ethics in a particularly exposed and precarious situation. Moreover, politicians like Callicles and Sophists of the type of Thrasymachus were already taking advantage of the situation to subject the common notions of right and justice to a destructive criticism. Thus Callicles insisted that "custom and nature are generally at variance with one another,"[44] and that the prohibitions and sanctions

[42] Plato, *Meno,* 72 A.
[43] Plato, *Meno,* 71 E.
[44] Plato, *Gorgias,* 482 E.

of conventional morality are merely the inventions of the "many weak" to protect themselves against the natural right of the fewer strong to exploit them. In this way morality had inverted the order of nature and enabled the weak to enslave the strong and to wrong and trample upon them. For, Callicles goes on, "the makers of laws are the many weak; and they make laws and distribute praises and censures with a view to themselves and to their own interests. . . . And, therefore, this seeking (on the part of the few strong) to have more than the many is conventionally said to be shameful and unjust and is called injustice, whereas nature herself intimates that it is just for the better to have more than the worse, the more powerful than the weaker; and in many ways she shows, among men as well as among animals, and indeed among whole cities and races, that justice consists in the superior ruling over and having more than the inferior." [45]

These views, it will be noted, were by no means wholly negative and skeptical, and Callicles was not turning Sophistic agnosticism against all morality indiscriminately. He might feel that the commandments imposed by the majority had no weight, save that of numbers, behind them and therefore imposed no obligation on anyone strong enough to defy them, but he insisted none the less that there was such a thing as a right and a wrong inherent in the natural order. What nature sanctioned, however, was not a democratic but an aristocratic ethics in which the strong, able, gifted few, rather than the mediocre many, laid down the law and set the pace. It was natural and therefore right that the fittest to live and make the most of life should survive and succeed, and it was contrary to nature and therefore wrong that they should be hampered by artificial obstacles placed in their way by the unfit and the weaklings.

We are reminded not a little of Nietzsche and of his indictment of Christian ethics as a slave-morality designed to nullify the inalienable right of the strong to rule the weak and to postpone the inevitable day when the "superman" should appear upon the earth and trample the vulgar herd beneath his feet. Indeed, it has been pointed out [46] that Callicles, although an

[45] Plato, *Gorgias*, 483 B ff. [46] Burnet, *op. cit.*, pp. 120, 121.

upholder of the democratic government, was also a child of his century, voicing, like Carlyle and Nietzsche in recent times, a widespread reaction against the vicious tendency of a democratic age to condemn and abolish everything of which everybody is not capable and to level all men down to an average mediocrity. Then, as yesterday, the "hero" and the "strong man" were coming into their own again as the objects of a revived cult. Callicles himself appeals to the example of Heracles who "carried off the oxen of Geryon, according to the law of natural right, and that the other possessions of the weaker and inferior properly belong to the stronger and superior." [47] And, for that matter, the Athenian democracy itself was willing enough to do "violence with a high hand" in dealing with smaller states that stood in its way—as when, without even consulting her, it inscribed Melos on the list of tributary members of the Empire and answered her appeal for justice by remarking "you know as well as we do that right, as the world goes, is only in question between equals in power, while the strong do what they can, and the weak suffer what they must." [48]

The *real-politik* of the Melian episode perhaps goes Callicles one better, and suggests, if anything, the views of Thrasymachus. For Callicles, though he turns the traditional and conventional notions of right and wrong topsy-turvy, finds that there are natural sanctions and standards for the morality he advocates. But Thrasymachus flatly denies that any such standards or sanctions exist. There is not even a natural right that the strong should rule the weak. They rule solely through the accident of their power, and it is their arbitrary will that determines what shall be right and what wrong. There is no moral order, no Justice in things such as Heracleitus and Aeschylus had dreamed of, and even Callicles in his violent way had admitted. "Justice," Thrasymachus says, "is nothing else than the interest of the stronger." [49] The different

[47] Plato, *Gorgias,* 484 B.

[48] Thucydides, V, 89 (trans. Crawley) quoted Zimmern, *Greek Commonwealth,* p. 435—for which see a résumé of the Melian episode.

[49] Plato, *Rep.,* I, 338 C.

forms of government, whether tyrannies, aristocracies, or democracies, "make laws democratical, aristocratical, tyrannical, with a view to their several interests; and these laws, which are made by them for their own interests, are the justice which they deliver to their subjects, and him who transgresses them they punish as a breaker of the law, and unjust. . . . In all states there is the same principle of justice, which is the interest of the government; and as the government must be supposed to have power, the only reasonable conclusion is that everywhere there is one principle of justice which is the interest of the stronger." [50]

In such circumstances the relation of the individual to the government is really one of chronic opposition and rebellion. "Justice and the just," Thrasymachus goes on, "are in reality another's good," not one's own. It is always to the interest of the individual to evade and disobey the law so far as he can do so with impunity. Nay more, if we are to prate in terms of old-fashioned morality, it is easy to show that as a rule injustice and wrong-doing pay much better than justice and right. The so-called just man, who obeys the law, loses by his honesty in business and taxation and politics, whereas the unscrupulous and so-called unjust man almost always wins. Indeed, the bigger the scale on which a rascal operates, the greater is his success and happiness. The tyrant, for example, might be disgraced and punished if he retailed his acts; but when he confiscates property wholesale and enslaves his fellow-citizens *en masse*, he "is termed happy and blessed, not only by the citizens, but by all who hear of his having achieved the consummation of injustice. For mankind censure injustice, fearing that they may be the victims of it, and not because they shrink from committing it. And thus . . . injustice, when on a sufficient scale has more strength and freedom and mastery than justice." Justice then, "is the interest of the stronger, whereas injustice is a man's own profit and interest." [51]

Doubtless the bark of both Thrasymachus and Callicles was worse than their bite. But plainly, too, sleeping dogs had been aroused which would no longer lie. The skepticism and

[50] *Rep.*, I, 338 E. *et seq.* [51] *Ibid.*, I, 343 C—344 D.

unrest of the age were at last in full cry on the scent of traditional morality. The old established sanctions of conduct and standards of right and wrong, and even the very idea of any moral order at all in things, were being pulled to pieces with the same ruthlessness as characterized the attacks of Protagoras and Gorgias upon the concept of a natural order or world-ground underlying the flux of sense. Just, then, as Protagoras and Gorgias had raised the problem of the possibility and extent of human knowledge, so Thrasymachus and Callicles and their like pushed to the fore the no less important question of the nature of the moral good and the character and extent of its hold upon human life. Men could no longer mistake custom and tradition for authority and accept the so-called moral law without questioning. They must be prepared, rather, to give a rational account and defense of the objects and justifications of their activities and institutions. Henceforth no philosopher could avoid the problems of ethics, and no system could pretend to any completeness that did not attempt their solution. Already, Democritus had supplemented his atomic and mechanical hypothesis regarding the nature of the world-ground with a discussion of ethics as well as a theory of knowledge, and the loss of his moral treatises was a great calamity for the history of philosophy. And in Athens itself, at the very heart of the skeptical movement, Socrates was making the determined attempt, which will form the subject of the next chapter, to work out an ethical theory on a sound and rational basis fit to withstand and even to confute arguments like those of Callicles and Thrasymachus.

It is a traditional but none the less true summary of the age of the Sophists to say that it was an epoch in which the eye of the mind was turned inwards, not outwards, and the interest of philosophy was shifted from external reality to human life. Man had been suddenly stripped of the background of nature with which, according to the Greeks, he was associated with such peculiar intimacy. The confraternity with the Gods, the kinship with natural phenomena, the sense of a deep-seated Justice and balance governing both men and things—for the fear of which the very sun dares not "overstep his measures"—all

these had been called into question along with the systems of the philosophers. Nay more, destruction threatened such law and organization as might linger on in human life through tradition and convention after their natural affinities and supports in an external world had been swept away.

Man, in a word, instead of being half lost to his own sight in the absorbing spectacle of the objective universe and of his speculations regarding its nature, now stood alone, thrown into relief against a great darkness with nothing but himself to arrest his attention and engage his thoughts. Each individual was the sole source of his own light, and the surrounding blankness did but reflect back to him the fitful visions cast by his particular desires and thoughts upon the thickness of its night. Even the seeming congregation of these lonely points of light and life into fixed constellations of social and moral order had been challenged as arbitrary and artificial, and dissolved into a host of wandering stars pursuing each its own flickering and erratic path against the background of the unknown and the non-existent.

The work of reorganization and reconstruction, whatever it might recover of traditional standards and previous systems, went on, then, of necessity in a new atmosphere. The old had to be worn with a difference. Man could not again lose sight of himself in any new objective universe, however engrossing, that his reviving speculations might descry. He had realized once and for all that he was at least as interesting and important to himself as was the outer world, and that his existence and nature set philosophy no less profound and difficult problems. It was, after all, the light of his mind, whereever it might come from, that discovered Reality in the darkness, and the glow of his desires, whatever might kindle them, that warmed it into beauty and goodness. If he was not the "measure" of all things, he was at any rate an integral and vital part of them. No matter how many former threads and designs philosophy might reweave into her next world-stuff, his sensations, thoughts, desires, and ideals must figure there in shining and distinctive colors, and enter largely into the spinning of its pattern.

## CHAPTER II

## SOCRATES

### I

Socrates, born about 470 B. C., is the first philosopher of note to claim Athens as his birthplace. He was the son of a respectable and well-to-do bourgeois couple, a sculptor and a midwife, who seem to have stood well in their respective professions and to have enjoyed the friendship of their richer and more aristocratic neighbours. He was very likely brought up to his father's trade,[1] but even as a boy he was of a dreamy and mystical temperament that verged on eccentricity. He frequently heard a voice, of divine origin as he thought, warning him against something that he was minded to do—although curiously enough it never suggested to him any positive course of action. He was given also to falling into "brown studies," or trance-like states in which he would remain for hours at a time, unconscious of everything that was going on about him. Once indeed, in camp, one of these trances lasted for a day and a night, much to the astonishment of his fellow-soldiers who observed and took the trouble to time it. It is not surprising that such a character, naturally fascinated by religious and philosophical speculations, was soon lured away from the paternal workshop and, for that matter, from any settled means of making a living.

But Socrates was no visionary and impractical ne'er-do-weel, and if at an early age he chose a life of poverty and vagabondage, it was not for lack of ability and moral fibre. His mysticism was balanced by strong ethical and political convictions and by an iron will in sticking to them through thick and thin. Nothing could induce him to do anything that he considered

[1] *Cf.* Zeller, *Socrates and the Socratic Schools*, p. 54.

wrong or prevent him from doing anything that he thought right. He withstood with equal composure the blandishments of his lover Alcibiades and the belaborings of his wife Xantippe, whose reputation as a scold has become proverbial but is doubtless exaggerated. Nor in his old age, when he happened to preside over the trial of the Athenian generals who had abandoned their dead after the battle of Arginusae, would he give way to the infuriated demands of the Assembly that all concerned should be tried illegally under a single indictment. He refused to put the question to the vote, but his resistance was overruled to the lasting shame of the Athenian people. Also, during the oligarchic episode of the Thirty Tyrants he braved the wrath of the government and endangered his life by declining to make an illegal arrest at its orders.

Moreover, he possessed not merely the moral courage of his convictions. In the campaigns in which he took part he displayed much physical endurance and tenacity in the field and bravery in battle. Once he saved the life of Alcibiades by risking his own, and once again by his coolness he extricated his friend Laches and himself from considerable danger. All in all, he had in him the stuff of which great missionaries and martyrs are made, as circumstances were to prove so triumphantly in the end.

For all his strong-mindedness however, he was not in the least a recluse or an ascetic. He was tolerant of human life and enormously interested in it. He had a cockney affection for the city and the city streets and the going to and fro of men in the market-place and the colonnades, and he loved not only to observe but to mingle in all that went on about him. Indeed he never left Athens except for military expeditions and one visit to the Isthmian Games. Trips to the country had no attraction for him. He had, he said, nothing to learn from mere landscape with birds and trees but everything from watching and conversing with his fellow-men.

There was, then, nothing grim or priggish or puritanical about him, or, one had almost said in spite of his teaching and influence, nothing of the moral reformer. His vision was too wide and his heart too great to permit of his sympathizing with

the fanaticism, narrow-mindedness, and ignorance of human nature that characterize so many modern would-be redeemers of society. We may ask, rather, whether they would not have been just the first to be shamed by his charity and pulled to pieces and made fools of by his irony and his remorseless questioning. Certainly his manner towards his fellow-beings was very different from theirs. He was never shocked, even when he disapproved. He never held up his hands in horror and never drew aside his skirts. He never affected a superior virtue or wisdom, or belittled the minds and morals of those who disagreed with him. He merely questioned them gently and relentlessly and sought to make them in the end confute themselves.

His view, too, of the good things of life was mellow and enlightened. The pleasures of the world and the flesh were not for him inherently those of the devil—evil, suspect, and to be suppressed. On the contrary they were naturally good, to be welcomed and enjoyed, though not abused. Temperance in all things, not prohibition, was to his mind the rule of proper living. To these pleasures, of which he was always ready to take his share, he contributed not a little in return. He was genial, brilliant, gay, witty, a great talker, always kindly if sometimes sarcastic, and a famous diner-out. The strongest heads in Athens were no match for him, and he could with perfect sobriety drink everybody else under the table and have not so much as a bad taste in his mouth the next morning. Plato in the *Symposium* has immortalized one dinner-party at which Socrates, who had discoursed at length about love during the evening, was found at cock-crow still talking, though on a new subject, to the two sole survivors, his host Agathon and the poet Aristophanes, and drinking with them "out of a large goblet which they passed around. . . . And first of all Aristophanes dropped, and then, when the day was already dawning, Agathon. Socrates when he had put them to sleep, rose to depart. . . . At the Lyceum he took a bath and passed the day as usual; and when evening came, he retired to rest at his own home." [2] Yet from behind this jovial, companionable and

[2] 223 C ff.

very human mask there shone forth the steady radiance of a mystical inner life, lived ever in the presence of the Gods.

Just how much of a philosophical education Socrates really had, and to what extent he was conversant with the older systems, are matters of some uncertainty. According to the ancients he was a pupil of both Anaxagoras and Archelaus, had talked with Parmenides and Zeno, and had a first hand acquaintance with the teachings of the Pythagoreans, Heracleitus, Empedocles, and the Atomists. This attribution of so wide-spread and profound a knowledge has, however, appeared suspicious to some modern critics, who have gone to the other extreme and minimized his debt to his predecessors.[3] But their critical attitude, again, has been questioned only lately in the light of a re-examination of the evidence, and an attempt has been made to justify and reinstate the opinion of the ancients as on the whole authoritative. Socrates, it is now maintained, actually did have a very considerable and thorough acquaintance with the achievements of the mathematics and philosophy of his time. He was really a pupil of Archelaus, though not of Anaxagoras himself, and he was particularly stirred and influenced by the Orphics, the Pythagoreans, and Zeno.[4] To their influences we must add the natural piety and mysticism of his temperament, which predisposed him to an unquestioning belief in an overruling Providence and in the immortality and transmigration of the soul, and prejudiced him against both the metaphysical theories of his predecessors and the skepticism of the Sophists. He had, he tells us, eagerly sought a solution of his perplexities in the hypotheses of the older philosophers. But he had found that instead of sharing his inclination to see "sermons in stones and good in everything" they had shown a lamentable disposition to have "recourse to air, and ether, and water, and other eccentricities," and to attribute the structure and behavior of the world to physical and mechanical causes rather than to a divine purpose ordering all things for the best. And this had set him to thinking on his own account.[5]

By the time that he was twenty-five, it would seem, Socrates

[3] *Cf.* Zeller, *op. cit.*, pp. 52 ff.

[4] Burnet, *op. cit.*, pp. 132 *et seq.* Taylor, *Varia Socratica*, I, pp. 162 ff.

[5] *Cf.* Plato *Phaedo*, 96 A–99 E. Xenophon, *Mem.*, I, 1, 11 ff.; 4, § 5 ff.

had broken his leading-strings and begun to develop his own system. He was already well known in Athens, and perhaps had even then become a frequenter of Aspasia's "at homes" and an intimate of the Periclean circle.[6] And he had attracted the notice and favorable comment of the venerable Parmenides. Doubtless, too, he had made good progress with the famous "Socratic method" of extorting a common truth from the loose and contradictory statements of different individuals. He was already laying hold of everyone he met, pinning him down to his words, racking his brains with a merciless and prolonged inquisition into his real meaning, and drawing and quartering his increasingly confused and gasping definitions with an ever more minute and painful dissection. We may thus carry back the characteristic image of Socrates to those early days, and fancy an ugly, pop-eyed, snub-nosed youth waddling awkwardly about the streets, trailing after him a crowd of young admirers who hung upon his every word as he chaffed and bantered with them or buttonholed and engaged in lofty conversation some self-important citizen, turning him to their great delight upside down and inside out with question and cross-examination. Nor can it have been very much later that he began to gather about himself that small inner circle—united to him, it has recently been argued, not only by affection but by a common membership in some sort of philosophic "school" or secret Orphic-Pythagorean cult [7]—many of whom remained faithful unto death.

In the course of the thirty odd years that it was gathered about him this crowd of friends and admirers numbered sooner or later many of the most important and famous men of the day. There were the brilliant and charming, but profligate and untrustworthy Alcibiades, and Critias, later the moving spirit of the oligarchic usurpation of the Thirty Tyrants. To them we shall have occasion to refer later. There was the beautiful Charmides, an uncle of Plato's, who later was to introduce his young nephew to Socrates. And among the more intimate disciples "who clung to him, not to excel in the

[6] *Cf.* Taylor, *op. cit.*, p. 132.

[7] *Cf.* Burnet, *op. cit.*, pp. 137–138. Taylor, *op. cit.*, pp. 17 ff.

rhetoric of the Assembly and the Law-Courts, but with the nobler ambition of attaining to such beauty and goodliness of soul as would enable them to discharge the various duties of life,"[8] were the devoted and enthusiastic Chaerophon, the Pythagoreans Simmias and Cebes from Thebes, the Eleatic Euclid from Megara, Xenophon, the leader of the Anabasis, and possibly the youthful Plato himself.[9] Of these some were with him when he died.

Before Socrates was thirty-five a curious event had occurred that crystallized his thoughts into a definite sense of divine mission and placed the direction of his life in higher hands. The admiring and impulsive Chaerophon had gone so far as to inquire of the Oracle at Delphi whether there were any man wiser than Socrates, and the Oracle with its accustomed tact, and perhaps not without a gentle malice which Socrates thought he detected in its answer, had replied that there was not. This answer set Socrates wondering. He felt that he possessed no wisdom small or great, and yet Apollo was a God and could not lie, for that would be contrary to a divine nature. The only way to test the oracle was to try to find a wiser man. So Socrates set forth on his search. First he addressed himself to a politician with a reputation for wisdom, but on questioning him he came to the conclusion that the great man was not really wise, although he was thought wise by many, and wiser still by himself. And he went away feeling that although neither of them knew anything really beautiful and good, still he was after all the better off of the two, for the politician knew nothing but thought that he knew, whereas he neither knew nor fancied that he did. This suspicion became stronger as he went from one man to another in all walks of life from pretentious philosophers and poets to humble artisans. "Even the good artisans," he found, "fell into the same error as the poets:—because they were good workmen they thought also that they knew all sorts of high matters, and this defect in them overshadowed their wisdom."

[8] Xenophon, *Mem.*, I, 2, 48 (trans. Dakyns).

[9] *Cf.*, however, Burnet, *op. cit.*, p. 209, who doubts whether Plato may be included among the more intimate disciples.

In the end, then, Socrates saw that the God was right, and guessed the meaning of his oracle. The truth was that God only was wise, and that the wisdom of men was of no account. Apollo did not mean to exalt him above others, but was merely using his name as an illustration, as if he said, "He, O men, is the wisest, who, like Socrates, knows that his wisdom is in truth worth nothing." Moreover, it came to him that he had been raised up to preach the word of the God and vindicate his oracle to all men. His search for one wiser than he was by no means finished; it was only just begun. He was to go on his way obedient to the God, making inquisition into the wisdom of anyone, whether citizen or stranger, who appeared to be wise, and wherever he found ignorance he was to expose it and thus prove the truth of Apollo's utterance. But, he felt, he was not to leave men in the ignorance to which he had reduced them. The same process of question and cross-examination as stripped them bare of everything that was pretentious and inexact would also betray the common form and mould in which their thoughts were really cast. And, by revealing the essential agreement in meaning hidden beneath the loose, unconsidered use of words and ideas, this procedure might also lead to certain generally accepted definitions in matters of consequence to human life as the foundation of a rational theory of conduct.

Socrates foresaw the difficulties and dangers of the path—the poverty, the neglect of worldly affairs, the antagonism to the political and social life of his city, the enmity of his fellow-citizens to which he would be condemned. He was conscious of the dislike that the first steps of his search had provoked and he lamented and feared it. But a divine charge had been laid upon him from which there was no escaping. A cup had been held to his lips, which it was for the God and not for him to suffer to pass from him.[10]

From this time on, Socrates felt himself to be the Apostle of Apollo to the Athenians. The ubiquitous buttonholing and the subtle and relentless questioning and cross-examinations with which he persecuted his fellow-citizens and made a nui-

[10] *Cf.* Plato, *Apology,* 21 ff. (Phrases from Jowett's translation have been freely used without quotation.)

sance of himself to high and low alike, became a solemn duty imposed upon him from on high, and were sustained and intensified by a mystical sense of divine favor and support. This earnestness naturally rendered his methods even more irritating, if anything, to those about him; and at a time, moreover, when misfortune was setting the Athenian nerves on edge. In his younger days, when Athens was at the heyday of her splendor and power, and his persiflage was less obviously actuated by a moral purpose, his sallies might perhaps seem even to those who suffered from them one more sparkle in the brilliance of the Periclean age. But the period of his maturity, his evangelism, and his greatest obnoxiousness fell within the long-drawn-out agony of the Athenian Empire and the era of political disorder that aggravated the years just before and after the humiliating end of the Peloponnesian War. Even in the earlier days of his mission some of his friends perhaps felt that he was going too far; and the poet Aristophanes—whom Socrates put to bed after the famous dinner-party at Agathon's —brought out a play, *The Clouds,* in which he ridiculed without mercy him, his set, and their doctrines.

Again, his calling, besides settling him like a troublesome gadfly on the Athenian people at a time when they were not in the best mood to be stung, also aroused a more serious resentment. Although he not only insisted on the necessity and naturalness of social and political organization and held the highest ideal of the function of the state and of the education indispensable to citizenship, but also himself set an example of obedience to law, he was unreservedly anti-democratic and would have nothing to do with the existing form of government. As an excuse for his non-participation in public affairs he pleaded that his mission left him no time for politics. And in truth the multifarious activities of Athenian citizenship afforded little leisure for other continuous work. But in the compact and tiny Greek states, which in comparison with modern nations were mere towns with their suburbs, such negligence could not but appear monstrous, nor could it fail to offend the deepest sensibilities of a race in whose sight political organization was the very law and order of the universe itself.

Socrates, then, to the eyes of his fellow-Athenians seemed totally lacking in public spirit and got the name of an undesirable citizen.

If his preaching had been merely mystical and unworldly, this abstinence would not have been so marked and so insulting. But, as it was, his mission brought him into collision with the established order at every step. He had no mercy on the institutions of government under which he lived or on the laws that he so loyally obeyed, and he never refrained from ridiculing and showing up the foibles and vices of the rule of the people. We have already had occasion to note some of his criticisms of the theory that all men are innately and equally fitted to govern and that no very special or profound education is needed to make a statesman. And if we are to credit him with the opinions put into his mouth by Plato in the *Republic*, he thought that the direction of public affairs should be removed from the control of the people altogether and placed in the hands of a governing class sifted out from the crowd by long training and severe tests in political ability and wisdom.

These views, although they were really as hostile to plutocracy and mere aristocracy of birth as they were to democracy, were naturally most offensive to the régime that happened to be in the saddle. They wounded the conceit of the masses, who fancied democracy to be intrinsically superior to any other form of government and who fell into the vulgar error of confusing the Athenian state with the Athenian constitution drawn up by Cleisthenes. To criticize that constitution was to run down one's country. To suggest that any form of government was better than the rule of the people was to attack sacred Athenian ideals. To propose to do away with democracy was a treasonable attempt to undermine Athenian institutions. And even to hold it up to ridicule was unpatriotic. No wonder, then, that Socrates seemed to go from bad to worse. Not only was he lacking in public spirit; he was a bad Athenian, and his teaching was calculated to unsettle the patriotism and subvert the "constructive citizenship" of the young men who flocked about him.

Worse still, some of his intimates seemed to have gone very

much to the bad under his influence. Was he not the bosom-friend of the dissolute and shifty Alcibiades, that "Alexander in the wrong place," as he has been called,[11] evil genius of the fatal Sicilian expedition which led to the downfall of Athens, political turn-coat and hatcher of oligarchic conspiracies, and a suspected ringleader in that most blasphemous affair of the mutilation of the statues of Hermes erected to the God of the ways at the street corners, as an act of piety, to bless and guard the city? Had he not had for an admirer, Critias, that renegade democrat, who had deserted his party in the hour of humiliation and need to become chief of the Thirty Tyrants and preside over the year's reign of terror, supported by foreign spears, that followed the surrender of Athens to the Spartans? And even though he had quietly defied certain orders of the Thirty that he considered illegal, just as he had tried to block the lawless procedure of the people after Arginusae, had he not quite calmly gone his way about the streets as if they were not running red with the best blood of the proscribed and massacred democrats? When, then, the democracy was reinstated in Athens in September of 404 B. C., it was in no temper to endure much longer being put through its intellectual paces and made to turn moral and logical somersaults for the amusement of the young, at the crack of the whip of this tiresome and terrible old man.

It is doubtful, nevertheless, whether even the really serious dislike and distrust excited by Socrates' political opinions and behavior were in themselves sufficient to account for the crisis that was now fast approaching. In any case the amnesty granted to all but a few of the most prominent oligarchs would have shielded him from charges based on political grounds. But he had also run foul of the religious bigotry of his fellow-citizens. He might be forgiven his "voice" and his trances. They were at the worst a visitation from the Gods and entitled him, if anything, to respect.[12] But he was associated in the minds of the people with the emotional, theatrical, protestant Orphic movement, which was fast degenerating into all sorts

[11] Holm, *op. cit.* (Eng. Trans.), II, p. 401.

[12] *Cf.* Burnet, *op. cit.*, p. 184. Taylor, *op. cit.*, pp. 10 ff.

of sensationalism and superstition. He was known to hold curious, non-conformist beliefs on the immortality and transmigration of the soul, and perhaps in his youth he had been actually initiated into the Mysteries.[13] It might even be, though this point is in dispute, that he himself was the centre of some Orphic-Pythagorean cult and teaching with strange foreign affiliations at Megara and elsewhere.[14] And, if this were so, who knew what such a secret brotherhood, international in its scope and character, might be up to? Even if it plotted no treason and threatened no direct danger to the state, the cosmopolitan nature, foreign character, and secret rites of this Pythagorean "free-masonry" were contrary to true Athenianism and the national spirit of the Established Church.

Furthermore, there was some ground for supposing that Socrates' eccentric piety might conceal a really blasphemous attitude towards the national cult. The long standing scandal of the mutilation of the hermae, which had so upset Athens sixteen years before, had not yet faded from men's minds. And there had also been stories, no less shocking to Athenian piety, of the Eleusinian Mysteries being parodied and profaned in private houses. To be sure, the authorities had been baffled. The perpetrators had never been discovered, and those who had been arrested, like Alcibiades for example, had been acquitted for want of evidence. But it had been suspected at the time who the ringleaders of the sacrilege were, and among them were counted Socrates' most intimate friends. The incidents had never been forgotten, but still smouldered and kept flaring up from time to time. And whenever people thought of them they remembered that Socrates had been in some way mixed up with the matter.

All in all, then, Socrates had come to impress people as a very disagreeable and undesirable person whom it would be to the public comfort to detach from the Athenian elders and to the public interest to remove from the midst of the Athenian youth. Four years after the return of the democracy the storm broke. In 399 B. C. he was formally accused of worship-

[13] Burnet, *op. cit.*, p. 191.
[14] Taylor, *op. cit.*, pp. 18 ff., p. 174.

ping not the Gods of the state, but strange divinities, and of corrupting the young by his teachings. Behind these charges there lurked, as we have seen, a life-time's accumulation of resentment at his methods, suspicion engendered by his religious beliefs and practices, and very real alarm at the apparent effect of his anti-democratic, un-Athenian views and teachings. To this, rather than to the face value of the indictment, his condemnation by a considerable majority was due. His accusers had proposed the death-penalty, but according to Athenian law Socrates had the right to suggest an alternative sentence, and had he asked for exile or imprisonment, or even the imposition of a fine sufficient to suit his offence to public opinion, his option would doubtless have been accepted. But it was the last straw laid upon his judges' patience when he proposed that, if he were to get what he deserved, he should be maintained at the public expense like the winner of a chariot-race at Olympia. The most he could afford to pay himself, he said, was one mina —an absurdly small sum—but his friends had offered to advance thirty if the court would accept that. The court promptly condemned him to death.

The sentence, however, was not carried out for thirty days because the ship that the Athenians sent each year to the festival of Apollo at Delos had been prepared for departure on the day before the trial, and during its absence the city might not be polluted by the execution of those under sentence of death. In the course of the month Socrates might have escaped without difficulty, and was urged to do so by his friends. But he refused to take advantage of their offers of help, saying that the law must be respected and that it would be wrong for him to disobey it. The ship returned from Delos of an evening, and the next morning his friends came to the prison very early, for they knew he had to die. He spent the day discoursing with them on the immortality of the soul, and bade them be of good cheer since no man who had adorned his soul "in her own proper jewels, which are temperance, and justice, and courage, and nobility, and truth," had anything to fear from death. And towards evening he bathed and said farewell to his wife and children. At sunset he asked that the hemlock be brought him,

and drank it. "And," says Phaedo, in whose person Plato describes Socrates' last moments, "hitherto most of us had been able to control our sorrow; but now when we saw him drinking, and saw, too, that he had finished the draught, we could no longer forbear, and in spite of myself my own tears were flowing fast; so that I covered my face and wept over myself, for certainly I was not weeping over him, but at the thought of my own calamity in having lost such a companion. Nor was I the first, for Crito, when he found himself unable to restrain his tears, had got up and moved away, and I followed; and at that moment, Apollodorus, who had been weeping all the time, broke into a loud cry which made cowards of us all. Socrates alone retained his calmness. What is this strange outcry, he said. I sent away the women mainly in order that they might not offend in this way, for I have heard that a man should die in peace. Be quiet, then, and have patience. When we heard that, we were ashamed and refrained from our tears; and he walked about until, as he said, his legs began to fail, and then he lay on his back, according to directions, and the man who gave him the poison now and then looked at his feet and legs; and after a while he pressed his foot hard and asked him if he could feel; and he said, No; and then his leg, and so upwards and upwards, and showed us that he was cold and stiff. And he felt them himself, and said: When the poison reaches the heart, that will be the end. He was beginning to grow cold about the groin, when he uncovered his face, for he had covered himself up, and said (they were his last words)—he said: Crito, I owe a cock to Asclepius; will you remember to pay the debt? The debt shall be paid, said Crito; is there anything else? There was no answer to his question; but in a minute or two a movement was heard, and the attendants uncovered him; his eyes were set, and Crito closed his eyes and mouth.

"Such was the end, Echecrates, of our friend, whom I may truly call the wisest, and justest, and best of men whom I have ever known." [15]

[15] Plato, *Phaedo,* 117 C ff.

II

We have already noted the point at which Socrates broke with his predecessors and contemporaries. As the various aspects of the universe, like consciousness and life, and matter and motion, and moral and natural law had been gradually disentangled from one another, there had been a growing tendency, which was on the point of culminating in Democritus, to conceive Reality in what we should to-day call purely "physical" terms. The world-stuff at the touch of Empedocles and Anaxagoras had already turned to cold and lifeless matter, and the world-process was fast on its way to becoming a wholly mechanical and purposeless operation actuated, not by a divine Providence, but by blind necessity. Mind had been segregated from the other elements of the All, not as a permanently dominant and governing principle, but as one among many substances whose superior activity was limited to merely setting the others in motion and then leaving them to their fate. And even this doubtful privilege was about to be taken from it by Democritus, and its only title to superiority was to consist in the special fineness of its atoms.

Moreover, the mind's reputation for veracity in observing and recording what went on had long been under a cloud. That the senses were out-and-out liars had been well known since the days of the Eleatics. And Parmenides' optimistic view that reason had an independent peep-hole on Reality, which enabled the intellect to see through the deceptions of the senses and know the truth, had not been altogether confirmed by the experience of Empedocles and Anaxagoras, who had complained not a little of the difficulties that they encountered in discovering the nature of things. Finally, Protagoras had come along and denied explicitly that any such knowledge was possible. Reason had no private access to Reality and no inside information about truth. It was dependent upon the senses for all it knew, and therefore all it knew was lies. Truth itself was nothing but a certain plausibility in one's sensations, a certain sense of things *seeming* to be true. And since there were as many "seemings" as there were individual sets of sense-

organs, there were as many truths as there were perceiving minds.

Now, with most of this Socrates found himself unable to agree. His innate piety balked at an irreligious interpretation of the universe. The evidence of design, as he thought, in everything was in itself sufficient to refute a mechanical and materialistic view. When one examined, for example, the body of man and saw how admirably adapted all its contrivances were to the discharge of their functions and the fulfilment of their purposes, could one any longer doubt whether things "constructed with such foresight" were products of chance or of intelligence? Must they not, indeed, seem "the handiwork of some wise artificer, full of love for all things living?" [16] Again, was it not obvious what tender pains the Gods had taken to furnish man with all he needed? Had they not supplied him with light by day and by night, with food and water and fire, with recurrent seasons and moderate climate, with domestic animals, and with the reason, memory, and imagination necessary to utilize all these gifts in the service of society and civilization? [17] It seemed plain to Socrates that all these things could be explained only on the supposition that the world was designed and governed by a divine power for the greatest good of all concerned.

Socrates, then, came out from his studies as disdainful as Protagoras and Gorgias of the value of philosophic hypotheses regarding the nature of the universe. But the causes of his dissatisfaction and contempt were not the intellectual reasons of the agnostic Sophists. They were to be found rather in the bias of the believing skeptic whose mind is made up beforehand to doubt all theories that conflict with his faith, and to regard as vain and demoralizing any speculation that might lead to an irreligious conclusion. But the practical result—the disparagement of pure science and of philosophical research and achievement—was the same in both cases. Indeed, the skepticism of Socrates was far more deadly. Protagoras and Gorgias had at least left an open field levelled for free and

[16] Xenophon, *Mem.*, I, iv, 5–6 (trans. Dakyns, pp. 26, 27).
[17] Xenophon, *Mem.*, IV, 3, §§ 3–12.

unprejudiced reconstruction. Socrates littered it with ethics and piety, the doctrine that the purpose of a thing explains its existence, and the sentiment that the most morally edifying account of the creation and disposition of the world must necessarily be the truest. He thus laid the foundations, capped by Plato and Aristotle, of an obstructive predilection for attributing the existence, structure, and movements of the universe to moral considerations and ends—a favoritism that stood in the way of the free development of science and philosophy for nearly two thousand years, and whose ghost still haunts us five centuries after our liberation by the Renaissance from its living presence.

But if Socrates believed implicitly in a providential direction of the world and set his face against the mechanistic tendencies of philosophy, he felt no less strongly that the mind could be no mere stuff akin, in all save its greater liveliness and function of thought, to the other material elements. The immortality of the soul was another article of faith for him. To say just how far he had developed ideas on this subject brings us somewhat prematurely to the vexed question of the extent to which Plato puts his own arguments into Socrates' mouth.[18] If, however, we may credit Socrates as well as Plato with the views set forth in the *Phaedo* and *Republic*,[19] he supported his belief with an elaborate argument and accepted the Orphic-Pythagorean doctrine that the soul is an immaterial essence akin to the Gods and in every way opposed to the gross bodily substances within which she is temporarily imprisoned. For our purpose, however, it will be more convenient not to take up these arguments until we come to discuss Plato.

Again, Socrates rejected the Protagorean skepticism regarding the powers of the mind. The speculations of his predecessors had been futile enough, to be sure. But that was not because the mind was born blind, but because it refused to open its eyes to the evidences of the providential government of the world and the divine destiny of the soul. Here, once more, the extent to which Socrates indulged in speculations of his own

[18] *Cf.* Zeller, *op. cit.*, p. 148.

[19] Burnet, *op. cit.*, p. 153, 154, 191. Taylor, *op. cit.*, pp. 17 ff.

is a mooted point. It has been customary to represent him as content simply to avert his gaze from the disappointing results of scientific inquiry and let it rest on the design and purpose in things, without scrutinizing further the nature of the universe. Even his theology, it has been said, was an appendix to his ethics.[20] On the other hand, the still more modern view to which we have just alluded, while granting his loss of interest in science and his preoccupation with the problem of the good, finds that in dealing with this problem as well as with that of immortality he fell back upon Pythagorean speculations and developed a considerable "metaphysical" system.[21] We shall do well then first to take up the Socratic teaching within the limits commonly assigned to it, and then to note the extensions suggested by some of the latest critics.

However much or little Socrates may have sympathized with Pythagoras' attack upon the possibility of knowing the world-ground, it is certain that he had no patience with the doctrine that the individual man is the measure of all things and that, even touching human ideals, institutions, and behavior, knowledge can reach no sure foundations of reality and authority beneath the shifting quicksands of different particular opinions. The interest and aim of his philosophy was just to show that if you go about it in the right way you can discover certain common and abiding features behind the apparent flux and relativity of moral standards and laws. These features are the same in all men at all times and places, and from them universally valid rules of conduct can be deduced.

For his method of procedure in running universal right and wrong to earth Socrates was perhaps indebted to Zeno. The latter, we may remember, had used, if he had not invented, the device of "dialectic," or arguing by a sort of running, give-and-take discussion. Instead of directly defending or urging your own view, you did so by innuendo. You assumed for the moment the truth of your adversary's opinions, and then showed by analyzing his definitions and ideas that certain absurdities and contradictions would exist if he were right. The suggestion

20 *Cf.* Zeller, *op. cit.*, pp. 112–117.

21 *Cf.* Burnet, *op. cit.*, pp. 154 ff. Taylor, *op. cit.*, pp. 178–181, p. 266.

was, of course, that since the opposite hypothesis proved to be untenable your own position must be correct. In Socrates' hands the dialectical method became a regular dialogue. You buttonholed your opponent and put a question to him. He answered, and, taking firmer hold of him, you asked just what you were to understand by his use of such and such a phrase or word. He naturally would try to explain himself, but you once more, with even tighter grip, would pick his reply to pieces and demand from him a further and clearer definition of his meaning. Each new answer on his part would be met by new analysis and new inquiry on yours, and so step by step you would back him up against a wall.

Take for example the investigation of the nature of "justice," attributed by Plato to Socrates in the first book of the *Republic*. What do we mean by the term? Is it "to tell the truth and pay one's debts," as the poet Simonides had said? But surely that is not always just. It is sometimes right to lie, and it would be very wrong to hand back his dagger to a madman. A better suggestion perhaps is that "justice" consists in doing good to our friends and harm to our enemies. But we must first distinguish between our real and our apparent friends, and our real and apparent foes. Shall we say that our true friends are the good, and our true enemies the bad? But in that case it will be just to make the bad even worse off than they are—which is absurd. Plainly we have been following a false scent.

Suppose, however, some Thrasymachus bursts into the dialogue at this point with the assertion that "justice is the interest of the stronger." But what does he mean by "stronger"? And what if the "stronger" mistake their own interest? Is it then just to obey them? Again, what is the interest of the stronger at any rate? The interest of the good physician is the health and welfare of his patients, of the good shepherd to feed and tend his sheep. The interest of the successful ruler, then, would seem to be not his private good but the good of the whole state. And, Socrates adds maliciously, this is borne out by the fact that we have to pay our politicians salaries to induce them to undertake the task of ruling us, whereas, if

Thrasymachus were right, the prospect of "graft" should be sufficient incentive. If, then, our first line of definitions lands us in an absurdity, our second leaves us in a self-contradiction. We must try again.

Now if everybody could only be backed towards a wall in this way, all, Socrates thought, would be seen converging upon the same point. Put any number of men chosen at random through a similar inquisition regarding the nature of justice, and, if the racking were severe and thorough enough, they would without exception confess to an identical definition in the end. The use of logic and argument, Protagoras to the contrary notwithstanding, could really extract from the confusion and antagonism of individual "truths" about justice a common and authoritative truth which all could be brought to see and accept. Moreover, the whole vocabulary of daily human life was in precisely the same case. Hidden behind its apparent looseness and disorder a real order was to be found. Deep down in every mind, buried under a litter of superficial and careless definition and ignorant prejudice, there lay the same fundamental notions of justice and temperance and friendship and courage and of all the other basic qualities and relations of human life. Right and wrong, good and evil, beauty and ugliness, seemed purely conventional and relative to time, place, and the individual, only because men did not stop to examine and analyze their ideas and to define clearly exactly what was in their minds when they talked and argued among themselves.

The procedure employed by Socrates was really an application to various moral and social problems of what we should to-day call the "inductive" method. This method is particularly associated by us with the name of John Stuart Mill, who in the middle of the last century analyzed and developed it at length in his *Logic* with reference to its bearing upon the nature of scientific investigation and proof. Its essence is a rigorous cross-examination and comparison of particular data with a view to extracting their common or "universal" qualities, and Mill develops at length the rules and safeguards necessary for an exact sifting of evidence and for proper inferences from it.

Our so-called "natural laws" and our scientific hypotheses are constructed by pushing the world to the wall in very much the same way that Socrates pushed his fellow-citizens. But, whereas Socrates confined himself to ethics and carried on a series of somewhat disjointed investigations, science and philosophy today apply his method universally and seek to reach definitions and general concepts that will cover and unite all the aspects of the universe.

In order to employ the inductive method in the sphere in which he was specially interested and to enter into wisdom and virtue, Socrates felt that one must needs take to heart the celebrated inscription on the temple of Apollo at Delphi, "Know thyself," which he adopted as the motto, so to speak, of his philosophy. For the first step in knowing oneself was to perceive how superficial and ignorant and prejudiced one really was. No man could even begin to be truly wise until it had been driven home to him how little he really bothered to be clear and straightforward with himself, or to think things out and discover the true significance of the phrases that he used with such an air of assurance and self-righteousness. But, when the preliminary stage of humble realization and confession of ignorance was passed, the task of self-examination and self-knowledge would lead, little by little, to a vision of that universal and enduring human nature, the same in all men in all times and places, upon whose heart was engraved the final and authoritative meaning of those great words that different lips, from lack of education, mispronounced so differently.

Mindful of his mother's profession, and perhaps actuated unconsciously by the universal human inclination to employ sexual metaphors, Socrates used a figure drawn from obstetrics to help explain his method of discovering through self-examination the true meaning of one's words and thoughts. Every mind was, as it were, pregnant with these meanings, and the process by which they were discovered and brought to light might not inappropriately be called a veritable bringing of them to birth. Socrates' own part in the matter was that of a midwife. His business was to stimulate and assist other men to bring into the world the true definitions or notions of justice

and temperance and right and the like, which lay already fully formed in their minds awaiting delivery. The slow and painful thinking out of the real meaning of these terms was a succession of birth pangs, and the way in which he drove men to inquire into the significance of each new phrase, and kept confining them to more and more exact definition, was the spiritual counterpart of the means employed by a midwife to help labor to a successful issue.

Another turn was also given to the metaphor by Socrates. The conversation by which men were invited to question themselves and to reflect upon what they really meant, might, he felt, be also regarded as a kind of initial begetting of fundamental notions. Argument, for example, among a group of individuals about the nature of justice seemed to impregnate their minds with its true form and cause them to conceive its definition. In a word, these general forms or notions which he was always so busy helping bring to birth sprang from the intercourse of minds, just as physical offspring were produced by that of bodies. Moreover, just as physical attraction impelled to reproduction, so generation of the knowledge of true justice and right and virtue was the result of the love of one mind for another. Friends were naturally more predisposed than mere acquaintances or strangers to discuss together freely and passionately the deep problems of human life and happiness, and were therefore the natural progenitors of the most searching and the noblest answers. Indeed, it was the duty of friends not to allow their affection to lie idle and sterile. Their love for one another ought to drive them to converse about these profounder questions, and was fruitful only if it succeeded in creating in them a vision, shared in common, of what was truly beautiful and good.

The transference of these figures of speech to the relation between master and pupil and friend and friend came all the more naturally to Socrates, since among the Greeks romantic love was associated, not with the attraction between men and women, but with that between man and man. The Oriental seclusion in which women were kept in Greece and their lack of education prevented them from being the intellectual and

social companions of men, save in rare instances like that of Aspasia at whom everyone looked askance. There was little home life and society as we understand the terms. Social life for men was largely life away from home, or at any rate from the women's quarters, in the Assembly and the market-place, the baths and the colonnades, and whatever other substitutes the ancients may have had for the club and the café. And when one entertained one's friends at one's own house, the ladies of the household were always conspicuously absent. The world of the Greek, in short, was essentially a man's world, and it was to men rather than to women that he looked for his most intimate associations, for his natural companions, and for the friends to whom he gave himself most unreservedly and upon whom his deepest and most enduring affections were centred.[22]

The seclusion and inferior education and position of women were, however, not so much the cause as the occasion, or even, one might say, the effect of this disposition of Greek society. The sexual instinct would seem in its primitive form to be directed impartially towards individuals of both the same and opposite sex. This diffuseness, which frequently passes into a distinct predilection for members of the same sex, appears always to exist to some degree in all persons,[23] but it is more marked in some individuals and peoples than in others, and its intenser forms are frequently found among primitive tribes. The Greeks, it has been suggested, were descended from a stock of which it was a characteristic,[24] and they retained this predilection in so open and accented a form, partly, no doubt, because the social conditions fostered by it were so favorable to its persistence. Indeed, seeing that their women were from seclusion and lack of education incapable for the most part of arousing the finer feelings and responding to the higher demands based upon the sexual instinct, we may reasonably doubt whether, in the absence of this preference, physical attraction would not have remained sterile in the Greeks, with-

22 *Cf.* Zimmern, *Greek Commonwealth,* pp. 337–338.

23 James, *Psychology,* II, p. 439.

24 G. Murray, *Rise of the Greek Epic,* p. 143. Zimmern, *op. cit.,* p. 338, note.

out fruition of those nobler aspects of passion that we call love, to the incalculable impoverishment of their life and genius. Be that as it may, as their civilization flowered they refined and expurgated their form of the sexual instinct, as we have ours, and built up an ideal of friendship in which the basic physical relation was as intermittent and subordinate as it was in the mediaeval worship of woman, or as it is in the modern cult of romantic love. Naturally, this ideal proved something of a counsel of perfection, and the more obvious lapses from it had to be deplored, as we to-day deplore the unruliness of the flesh and the importunity of unsublimated desire. The Thebans, indeed, sought to turn these passionate friendships to military uses and the service of the state, by forming their *corps d'élite* of lovers, on the theory that such would be shamed from the slightest act of cowardice and spurred on to emulate each other in deeds of heroic courage. Nor was their confidence misplaced, for after the battle of Chaeronea not one of the gallant band was found alive. Similarly, Socrates tried to enlist this affection in the service of philosophy and society and to employ it as an incentive to a noble and unselfish competition in acquiring knowledge and virtue.

If Socrates' great commandment was "Know Thyself," the principle that summed up for him all the law and the prophets, and upon which this commandment rested was that all virtue is knowledge. In the first place, it was obvious that in order to be just, pious, temperate, and courageous one had first to know what justice and temperance and courage really were. He, for example, "who knows what the law requires with respect to the gods will correctly be defined as a pious man," [25] and "those who know the things which are lawful as concerning men" [26] will be rightly defined as just and upright. Or again, take wisdom and temperance. "Was a man able on the one hand to recognize things beautiful and good sufficiently to live in them? Had he, on the other hand, knowledge of the 'base and foul' so as to beware of them? If so, Socrates judged him to be wise at once and temperate." [27] Instinct, convention, the loose

[25] Xenophon, *Mem.*, IV, 6, § 4.
[26] *Ibid.*, § 6.
[27] *Ibid.*, III, 9, 4 (trans. Dakyns).

and unconsidered opinions of the crowd on these subjects, would not do. Each man must think things out for himself, and not stop until he was sure that he had probed to the quick the good and the bad, the fair and the foul, and had a correct and certain knowledge of what was what. If he stopped short of a correct definition his conduct would be based upon ignorance or prejudice, and would not be wholly enlightened and truly virtuous.

But the principle, "virtue is knowledge," had also in Socrates' mind a more far-reaching and positive application. Man, he thought, naturally sought his own good and did what he believed to be to his best advantage. No one deliberately tried to harm himself or did wrong on purpose. We went wrong simply and solely because we either mistook or did not know the right way. It was ignorance that was the root of all evil. Remove ignorance, and right action would be spontaneous and instinctive. In a word, if only a man knew what was right, he would do what was right without further stimulus; if only he knew what was wrong, he would quite mechanically and surely avoid evil. Knowledge was more than a guide to virtuous activity. It also provided the driving power. It propelled as well as steered men on the right course.

Here, as has been often remarked, we put our finger on one of the weak spots of the Socratic ethics. Socrates failed to reckon with passion and impulse, which often drive us in the face of our better judgment to do deliberately what we know to be wrong and to our disadvantage. Seeing and approving the better, we follow the worse. Again, as Spinoza pointed out, passion can only be fought with passion. Knowledge in itself has no motive or even guiding power. We must have a steady and overwhelming *love* of truth and goodness that will blot out all other loves, if we are never to be seduced by the desires and pleasures of the moment. In a word, the Socratic theory is too intellectual and does not give sufficient weight to the part played by feeling and emotion in moral action.

But to return to our exposition. The doctrine that virtue is knowledge, besides affording in Socrates' opinion a working basis for conduct, also provided a principle of unity for all the virtues. Justice, for instance, was knowledge of proper action

towards men; piety, of proper action towards the Gods; courage, of proper action in the face of things really to be feared. The virtue, then, and the unity of these qualities lay in the common basis of correct knowledge which their definitions all implied. Everyone, young and old, men and women, rich and poor, tyrant and slave, was capable of this selfsame knowledge. There were not, therefore, separate and distinctive virtues of man and woman and the different stations of life, as Gorgias had maintained, since the principle of good conduct was the same in all. Virtue, although displayed in different ways and in all sorts and conditions of men, was one not many.

Finally, Socrates' definition of morality enabled him to deal to his own satisfaction with the interesting problem, of which the Sophists had made a burning issue, whether virtue was a natural endowment and function of mankind or an artificial and acquired convention, and whether it could or could not be instilled by teaching. This question Socrates answered in both senses. Virtue could be taught and acquired. Indeed, the end of education was to make men good. But the teaching of morals was not the instilling into the mind from without of an arbitrary convention foreign to its nature, as Protagoras and Gorgias had supposed. It was rather teaching the mind to know itself, to discover the disposition with which it was naturally endowed, and to attain a clear vision of the good which it was instinctively inclined to follow. The strength of this disposition and this vision, of course, like strength of body, might differ in different individuals. It was notorious "that people brought up under the same conditions differed greatly" in their morals. Nevertheless, Socrates felt that by learning and practice the natural aptitude towards virtue might always be strengthened. Indeed, it was a general principle that the "natural differences of one man from another might be compensated by artificial progress, the result of care and attention." [28]

He could not, however, rest in the definition that virtue is knowledge without further amplification of his meaning. For if he did, the question provoked by his own method was sure to

[28] Xenophon, *Mem.*, III, 9, § I *et seq.* (trans. Dakyns).

be on everybody's lips. Virtue is knowledge, yes, but knowledge of what? The ready and apparently simple retort was —why, knowledge of goodness, of course. Such an answer, however, was really too good to be true, and by its very redundancy of virtue fell into a vicious circle. For we should naturally ask next—but what is goodness? And we should naturally be told in reply that it was knowledge of virtue. But obviously to be told that morality is having a moral opinion about morals, and that morals consist in having a moral opinion about morality, would leave us just where we were at the beginning. We should only have revolved like a squirrel in its cage, and for all our pains we should find ourselves no nearer to knowing what goodness and virtue really were. The important thing was to know our reasons for counting justice, temperance, courage, and the like as virtues rather than vices. Why was it that the distinction between right and wrong existed at all? And why did we catalogue our behavior as we did, docketing this act among the rights rather than the wrongs, and that among the wrongs rather than the rights? What was the principle that separated good from evil? What was it that constituted the goodness of the good, and made the knowledge of it virtue?

In determining the answer that Socrates gave to this question we can no longer avoid the opposed interpretations of his views to which we alluded earlier in this chapter. If we accept the view of the more old-fashioned, more conservative, and perhaps more reliable modern critics, who see fact in the *Memorabilia* and fancy in the Platonic Dialogues and draw their picture from Xenophon and so much in Plato as does not go beyond and improve upon him, we shall regard the Socratic reply as modest in scope, middle-class in tone, and vaguely conceived at that. But more exciting though more questionable vistas are opened, if we follow some recent scholars who suspect Xenophon of having taken his information largely second-hand from Plato and of having sifted and colored it with the express purpose of refuting the charges against his master.[29] These critics find no difficulty in regarding Socrates as the author as well as the

[29] Burnet, *op. cit.*, pp. 147 ff.

mouthpiece of the substance of the *Phaedo* and *Symposium*, and in attributing to him "the whole theory of goodness expounded in Plato's earlier dialogues down to and including the *Meno*, and even, in substance, that set forth in the *Republic*." [30] Fortunately it is not incumbent upon us to rush in where others themselves tread gingerly.[31] We have only to outline the two views, and leave the question open.

To return, then, to the more conventional interpretation. Socrates, we are told, when it came to answering the all important question—what is this good the knowledge of which is virtue?—fell back for his reply upon the standards laid down by the Sophists. The good thing was the conventional thing—the thing hallowed by tradition and usage and crystallized by the law of the state. So far as "religion and the concerns of heaven" were in question, Xenophon tells us, Socrates' "behavior conformed . . . in conduct and language . . . to the rule laid down by the Pythia (at Delphi) in reply to the question 'How shall we act?' as touching a sacrifice or the worship of ancestors, or any similar point. Her answer is '*Act according to the law and custom of your State, if you will act piously.*' " [32] Similarly to act towards one's fellow beings according to the law and usage of one's state was to act rightly.[33] Justice, as we saw, he defined as the knowledge of "those things which are lawful concerning men." And we remember that he refused to escape from prison because he felt it morally wrong to disobey the laws of the city even though they had condemned an innocent man.[34]

Plainly, however, such a reply was only a makeshift and a half-answer. Some rational basis had to be found for the authority of law and custom and for the existence of this usage and statute rather than that. Otherwise one would be drifting dangerously near to the doctrine of Thrasymachus that right and justice were arbitrary and artificial principles, and that law and custom derived their existence from the selfish

30 *Ibid.*, p. 173.
31 *Ibid.*, pp. 149–150.
32 Xenophon, *Mem.*, I, 3, § 1. *Cf.* IV, 3 § 16 (trans. Dakyns).
33 *Ibid.*, IV, 4, § 1 ff.
34 *Cf.* Plato, *Crito.* 50 A ff. Xen., *Mem.*, IV, 7, § 1.

interests of the stronger and drew their authority and majesty solely from the power of the governing class to enforce them.

This deeper, rational basis for morality was found by Socrates in the concept of utility. The good was what was useful and beneficial to man. The virtuousness of all the virtues consisted in their superior advantage in this respect over the vices. Justice was better than injustice because the obedience to law and order that it implied made the state more powerful and prosperous and the individual more secure and "more honoured at home and abroad." [35] Continence and temperance were more virtuous than intemperance and lack of self-control because by the impetuousness and haste of incontinence we were "cut off from the full fruition of the more obvious and constantly recurring pleasures." To self-control alone, thanks to the power it gave to wait till one was really hungry and in the best appetite and to stop when one had had enough, belonged "the power to give us any pleasure worth remembering." [36] The whole catalogue of the virtues could be run through and analyzed in a similar manner, and each would be found to confer a greater pleasure and benefit than could vice. Nay more, even a quality so apparently disinterested and untormented by morality as beauty could be reduced in every case to terms of appropriateness and service to a particular use." [37] The essence then of the beautiful and the good lay in utility, and virtue was knowledge of what was useful to human life.

At this point we seem merely to have returned, though by a safer and more reasoned road, to the Sophists' idea of virtue as worldly wisdom and success. Whether this is actually the case depends upon the meaning we give to the term "useful." For, in identifying the good with the useful, Socrates had by no means extricated himself from the vicious circle of definition by synonym or given any final meaning to the word "goodness." He had simply raised the deep and difficult question of defining utility, and had answered it by saying that the

[35] Xenophon, *Mem.*, IV, 4, § 13 ff.
[36] *Ibid.*, IV, 5, § 7 ff. (trans. Dakyns).
[37] *Ibid.*, IV, 6, § 9.

useful is that which is good for some good end or purpose. Here, at last, though we are still defining words in terms of one another, we catch sight of the crux of the moral problem. In order to decide what is really useful and good for the purposes of human life we must first determine what those purposes really are. This is the final and critical question, since the nature of our answer will depend upon and reveal once and for all our vision of the destiny of man and of the ends after which it is truly worth while for him to strive. What, then, was Socrates' view of the true aim of human life? What in his opinion was the use of being temperate and self-controlled and just? What was the good of being good?

The sense of the interpretation that we have been following is that at this point Socrates actually did falter and slip back to a position not unlike that of Protagoras and Gorgias. He found, indeed, that the Sophists had grounded human conduct on an insufficient, insecure, and shifting base, and for their jerry-built foundations he proposed to substitute bedrock. But, after he had hewn a firm and tested substructure out of solid principle, he built upon it a house of life that was little higher than theirs and that was planned in much the same style. He did not get beyond a severely practical, middle-class, Philistine ideal of what was requisite and sufficient for a good life. Human existence, as he seems to have seen it, was aimed at nothing beyond virtuous, respectable, orderly living. The demand for a stable, upright, prosperous society exhausted the yearning after perfection, and since the prevalence of justice, temperance, self-control, and the like were equivalent to law and order, safety and content, a "full dinner pail," a radio, and a Ford, he identified these homely virtues with the sovereign good. Virtue was its own and sufficient justification and reward. To be a sound, practical, plain person who knew and did right was to have fulfilled the destiny and discharged the whole duty of man.

But to the Graces and the Muses, whose handmaidens the virtues are, Socrates did not raise his eyes. He took little interest in the things that ennoble and justify existence to the aristocratic, the educated, and the refined. The reaches of

experience disclosed to sensitiveness of perception, feeling, and thought, and the infinite shades of meaning with which life excites, intrigues, and half yields itself to those possessed of imagination and insight, were a closed, or at the most a half-cut, book to him. The wonder and beauty of the world, the tremendous and amazing spectacle of all time and existence, the pageant and drama of human history, and the surprise, the strange and sudden adventure, the comedy and the tragedy of each individual career, left him cold. The Sophists had been indifferent to the study of art and literature unless it could be turned to practical account; but Socrates was antagonistic to it unless it could be made to teach a moral lesson. Even the violet crown and the laurel wreath of his own Athens he would have deemed useless because they were not edible.

Yet for the Greek, as for every other people and age of high and enlightened civilization, the sovereign good of all human striving lay just in those further reaches, those subtler meanings, that fugitive wonder and beauty, to whose charm art, literature, and religion, and elegance and distinction of living are so impassioned a response. From this wider point of view the achievement of bare moral principle and upright living is not the end but the beginning of human progress. One may of course roof over the cellar of the house of life with self-satisfaction and inhabit it, if one chooses, living, propagating, and dying in all respectability, under ground. Righteousness and prosperity and social order and comfort can exist without taste or enlightenment or distinction. But the fact remains that the cellar is meant, not to house man, but to afford a firm foundation for a superstructure of humane and splendid civilization tending to the stars.

The reasons for the possible short-sightedness of Socrates' ethics are not far to seek. Perhaps it was in part a handicap of his bourgeois birth and early circumstances, aggravated by the increasingly "practical," "efficient" atmosphere of democracy in which his mature and later years were spent. But doubtless, also, it arose from his genuine alarm at the unstable foundations of conduct proposed by the Sophists, and from the consequent absorption of all his interest and attention in

the problem of discovering the basic principles and virtues without which the higher attainments of civilization, however brilliant, can have only a precarious and fitful existence. The engineering difficulties were so great that he could spare no time from their solution for working out the architecture of a moral order above ground. And on no account could he accept any suggestions tending to diminish the severity of his fundamental principles and break through the plain, stern surfaces of his moral masonry for the sake of a magic casement or two

> "opening on the foam
> Of perilous seas in faery lands forlorn,"

or even for the sake of a little more sunlight and a freer air.

So much for the first interpretation of the Socratic teaching. Let us now pass to the more vivid and interesting, though it may be less reliable, picture painted by those who draw their materials from a wider selection of the Platonic dialogues, including the *Phaedo*, the *Symposium*, and the *Republic*. As we have already pointed out, it is a portrait that credits Socrates with much wider speculation and a more profound conclusion. It depicts him as essentially a Pythagorean at whose hands both the mathematical and the mystical doctrines of the sect received a new fusion and a new application both moral and metaphysical.

In the first place, we are told, the Pythagorean doctrine of "Forms" illumined the whole Socratic method of discovering ultimate meanings and universal definitions. The Pythagoreans had said that things were really numbers, and had illustrated their theory by outlining different shapes, and then filling them in with a mosaic of units and counting the number it took to pack solidly each of the skeleton forms in question. And they had treated not only material objects but moral qualities and social institutions in this way, finding numbers even for marriage and for justice. We may note in passing that this theory, along with the Heracleitean doctrine of the Logos, had made important contributions to the growing distinction between "form" and "matter," and to the question of the kind

of existence to be attributed to abstract things like laws and qualities.

Upon this teaching Socrates seized. It revealed to him the true end and the final limit of the search that he had undertaken. Class definitions or "universals," which could be discovered by comparing particular instances and sifting from them their common element, were not man-made notions. Far from being matters of individual opinion and chance agreement, their foundations lay even deeper than the common humanity that underlay different races and individuals. For that matter they transcended the sphere not only of things that exist "by convention" but even of those that exist "by nature." Their basis was, as it were, "supernatural." They were Pythagorean Forms imbedded in the very essence of Reality, and their existence in no wise depended upon the human mind. They were eternal and unchangeable, and would shine on undimmed and steady long after the passing rivulet of human life in which they were brokenly and vaguely reflected for the moment had dried up and disappeared. If the argument and cross-examination by which men discovered these pure essences might be called a begetting and bringing of them to birth, their seeming generation was in truth an incarnation and a nativity in which a Logos was made flesh.

Furthermore the Forms in which Socrates was interested were those of the virtues, and hence were of great and immediate moment to human life. The discovery and definition of them was a matter not merely of logical and scientific interest and satisfaction but of moral enthusiasm and happiness. Their dry white light was suffused with the eager, rosy glow of goodness. They were reflected in his mind not merely as ideas but also as ideals. They were, then, divinities as well as realities, and their dwelling place was most fitly described as with the Gods. This common element of perfection was itself a still higher Form—that of the pure and sovereign Good—which shone at the heart of every abstract virtue, just as courage and justice in the abstract shone at the heart of every just and courageous deed on earth. Thus at a stroke of the Pythagorean wand the common meanings of homely words were

transfigured into "higher realities," and the moral order, which had been overthrown and dragged down to earth for a moment by the Sophists, was re-enthroned at the centre of the universe.

But how was it that such august realities condescended to human life and could be known by man, victimized as he was by the deceptions of his senses and the deficiences of his reason? It was no answer, according to the Pythagorean and metaphysical Socrates, to invoke the inductive method and say that reason extracted concepts from the comparison and cross-examination of particular instances presented to the senses. One could not, for example, simply assert that the existence and nature of justice in general was suggested by the occurrence in our experience of various data whose likeness to one another led to their being grouped under the same heading and called by the common name of "just." The problem was by no means so simple as that. In the first place, how could we be sure that these likenesses were more than accidental and that the group name was more than a mere convention and stood for a real quality, one and the same in all instances? Protagoras might be right. There were perhaps no universal principles and qualities at all. Just as there were as many truths, so there might be as many temperances, courages, beauties, and the like as there were individual opinions about them.

Moreover, the inductive method presupposed a natural ability on the part of the mind to compare things, to see their likenesses and differences, and to assign them to their proper groups. But this ability could not be taken for granted. Indeed, it constituted one of the central difficulties of the problem of knowledge. If, for example, a child at its first visit to the circus should take to naming correctly animals whose pictures, even, it had never seen, and should rapturously exclaim that the lion and tiger belonged to the same cat family as little pussy at home, we should consider him precocious and even uncanny. Yet the mind was behaving in just this unaccountable way. Apparently without any previous acquaintance with beauty and temperance and courage it recognized off-hand beautiful, temperate, and courageous things and acts when

it met with them, and called them familiarly by their right names. Just, then, as we should feel that the precocious child must beforehand have seen the pictures and heard the names of the animals that he recognized, and have been told about the relationship of the lion to little pussy, so, we are told, the Pythagorean Socrates felt that our ability to compare experiences and say that one thing was like, or of the same class as another implied necessarily that the mind was in some way provided beforehand with a set of descriptions of the different forms to which our various experiences kept corresponding. Our feeling of similarity and our recognition that two or more objects belonged to the same class were just the pocketing of things by the special mould into which they fitted. Unless our reasons came already furnished with these different moulds in the shape of justice and temperance and courage, etc., for sifting and sorting experience, sense-data would roll about loosely and indiscriminately in the mind, and we should never perceive likeness or unlikeness, know one thing from another, or be able to classify objects at all. Instead, then, of general ideas and class-concepts being precipitated by reflection and reason from a comparison of particular objects, the power to extract the common qualities in things presupposed and depended upon a knowledge of these concepts existing full-fledged in the mind.

But, if the pure Forms of beauty, temperance, justice, and the like could neither be directly perceived by the senses nor built up indirectly by reason from reflection upon sense-data, how could the knowledge of them get into the mind? The answer to this question was found in the Orphic-Pythagorean doctrine of immortality. Socrates, as we have already remarked, is represented in the *Phaedo*, and again in the *Republic*, as arguing that the soul is indestructible and as rejecting the view, inspired by the mathematical interests of the Pythagoreans and quite inconsistent with their religious tenets, that she is merely the harmony or attunement of the body. Having once established immortality to his own satisfaction, he could go on to say that in a previous existence the soul, herself akin to the divine, had beheld pure and perfect justice, temperance,

courage, and beauty face to face. And in her earthly life, although imprisoned in the dark tomb of the body and shut off from her former vision by the burden of the flesh, she still retained dim memories of those higher realities with which she had once consorted. Peering out from behind her prison bars through the opaque and narrow windows of sense, she caught familiar but puzzling gleams and reflections in the turbid flux of experience. They reminded her of something that she could no longer recall except confusedly, and aroused latent memories which struggled within her to regain and recollect their great originals. The reflections that evoked the same memory she felt to be similar. The gleams, for example, that stirred and half awakened her sleeping memory of eternal beauty she called beautiful, and those that unsealed her dim vision of absolute justice she called just. All so-called knowledge, then, was really only a recollection. When by comparison and cross-examination of data we arrived at a definition or extracted a universal principle or idea, we were inventing or discovering nothing new. We were merely reminiscing about some old, half-forgotten truth with which all men had been perfectly familiar before they were born. And the dialectical process of reasoning by which one proceeded from particular instances to the general rule, and from the concrete to the abstract, was in reality a process of escape from the prison of the body and the fetters of sense and passion into the realm of pure and eternal Form—a return of the soul towards the original and proper objects of her contemplation.

The doctrine of pre-existence and of conversance before birth with the pure Forms of things not only explained knowledge in Socrates' eyes; it also made clear to him the true origin and goal of all our affections and interests. The Forms, being perfect, were true and supreme goods, the natural objects of love and desire as well as of contemplation. So it was that the soul came into the body bringing with her memories that were also yearnings. These "first affections" were kindled, just as her "shadowy recollections" were stirred, by her contact with the world of sense, suggesting, as it did, in its blurred, inconstant way the glories she had known before birth. Love, then, like

knowledge, was a memory, a homing back of the soul to the scenes of her pre-natal existence. It was not really directed towards material and individual objects, which accidentally provoked it, but rather towards the perfect and eternal Forms or essences—pure and abstract justice, or temperance, or courage, for example,—whose steady light gleamed brokenly through their incomplete and fleeting embodiments in particular things. Nowhere was this more evident than in the soul's passion for beauty. She was forever falling in love with beautiful bodies, but her yearning, though it might be excited and fed by physical loveliness, could not find its true good and final satisfaction in the sensible world. Whatever the transports of possession might be, they left her balked of complete union with the object of her desire. From the beauty of the sunset and the arms of the beloved alike she came away weeping for that which they had brought so near but had just failed to give. Only when she had risen above the love of the body and the sensible world and had embraced the disembodied Form or essence of absolute beauty in itself, could the goal of all her striving be reached and the restless longing which had defied and thwarted every earthly love be stilled.

From this mystical, Pythagorean re-interpretation of Socrates' views we get a new light on his teaching that virtue is knowledge. The vicious circle of definition appears to be broken, and we seem to be in a position to give an authoritative definition of goodness and utility. This definition absolves him from the accusation of having fallen back upon the Sophists' doctrine of expediency and material success as the means and end of life, though it leaves him open perhaps to the charge of taking too unworldly a view of the world. If the soul has a divine origin and destiny, and her earthly life is a lapse from her high estate into poverty and disgrace, obviously her true interest will lie in regaining her birthright and fitting herself for a supernatural career, and to this end all her energies should be bent. The world and the body can give her nothing—except the physical foothold necessary in this life for keeping her head above the clouds. At the best, the ties in which they imprison her need not interfere with the pur-

suit of salvation; at the worst, they bind her down beyond hope of rising.

The useful and the advantageous, then, in the knowledge of which virtue consists, has nothing to do with external conditions like worldly success and prosperity. Nor has it anything to do with the development and self-realization of the "natural man." Virtue is rather knowing how to cultivate an inward disposition of the soul that shall keep the soul independent of earthly surroundings and in touch with heavenly things. This disposition, which is the end and the essence of right doing, is dependent upon a condition of harmony and proportion akin to the balance and attunement that in the Pythagoreans' theory of medicine constituted the health of the body and in their metaphysics made up the essence of the soul herself.

In Socrates' application in the *Republic* of this harmony both the individual and the state are divided into three parts. In the individual there are reason, temper or spirit, and desire, and corresponding to them are the rulers who govern the body politic, the military forces which protect it, and the artisans who carry on its economic processes. In a virtuous, or, to use the Socratic term, a "just" man, as in a well-ordered state, the activities and desires that carry on the economy of his body will be obedient to the dictates of reason, or in other words, temperate. The heart and spirit which animate and preserve him will always be really courageous; that is, guided and controlled by a rational estimate of what is truly to be feared and avoided. And finally, if he be truly virtuous and wise, reason will hand down no commands save those inspired by its proper function of knowing the real essences of things and the true and sovereign good.

If, then, this new picture of Socrates be correct, the Pythagorean teaching that things are essentially numbers or Forms and the Orphic-Pythagorean doctrine of the fall and transmigration of the soul dispelled the doubt and the disappointment aroused in him by the mechanical and materialistic views of people like Anaxagoras, and by the skepticism of the Sophists. He now saw that Reality was immaterial and that, apart from the Forms or essences that they embodied and

exemplified, concrete objects, for all their seeming robustness and solidity, would collapse into a spineless, nameless, indistinguishable flux and chaos. He saw, also, how truth and goodness were not multiple and dependent upon the whim of the individual, but were universal, self-subsistent, and eternal, and hence how knowledge was possible and morality authoritative.

But by this time he would have become quite as inextricably involved as any of his predecessors or contemporaries in the old difficulty of reconciling appearances with the real situation as he conceived it. The Milesians, as we have seen, had raised the problem by their simple assumption that a single, homogeneous world-substance could actually be a thousand things which it obviously was not, and vice versa. The Eleatics had drawn the conclusion that, since Reality was one and unchangeable, the multiple, varied, moving world in which we live was unreal and an illusion. But they had not realized the necessity of showing how such a reality could appear to be other than it was, and where the illusion came from. Heracleitus, in spite of the ever-living Fire, had never found a common denominator for the Logos and the flux. Nor had Empedocles, Anaxagoras, and Democritus satisfactorily accounted for the fact that things as we perceive them are so different from things as they are. And now Socrates would have been in the same fix. He had transferred all the reality in a thing from its concrete, individual aspect to the abstract Form or nature of which it was an instance. But if the abstract Forms of things alone were real, how came it that there was anything besides the Forms? Why were there a myriad individual instances of beauty and justice as well as the one pure and undivided essence of justice-in-itself, or beauty-in-itself? What was the relation of the shifting world of individual, concrete objects to this immaterial and eternal reality?

Socrates, according to the theory we are discussing, in some measure perceived and dealt with this difficulty. He did not have recourse to the Eleatic theory that the world of sense was all false opinion and illusion. Nor would he accept the suggestion made by his Pythagorean friend, Cebes, that it was a

mere image or likeness of Reality.[38] The relation between the two worlds was closer—was one, not of divorce, but of marriage—and he expressed it by the term "participation." The particular thing, we might say, is real, to be sure, only in so far as it has or "participates in" Form. But no concrete object partakes of only one Form, nor is any Form exhausted by and confined to only one instance of itself.[39] In any such case the instance would be indistinguishable from the Form that it exemplified and would be identical with it. For example, if a beautiful individual were just beauty in its entirety and nothing else, he would not be a mere instance of beauty but beauty in itself, pure and unadulterated. A beautiful individual, however, has also the human Form which makes him a beautiful man rather than a beautiful horse or cow. He participates likewise in the essence of blackness or brownness or whiteness as the case may be, and he may also have courage and temperance and justice in his make-up. He is then, compounded of many Forms or essences. But each Form in which he shares is in itself absolutely "straight" and uncompounded—is, for example, the essence of beauty and of nothing else, or the Form of courage pure and simple.

It was this overlapping and compounding of Forms, we are told, that in Socrates' mind accounted for the existence of a sensible, phenomenal world of many, different, individual things. Each concrete object is, to use a mathematical illustration, a point formed by the intersection of a number of Forms. Now a point is nothing but a share or portion of a line. That portion is all it is; in other words, is all the reality it partakes of and possesses. Still, if a point lay only in one line, it would never stand out from the line and "appear" as a separate reality. But cross one line with another, and it "appears," immediately brought out by the fact of partaking of two lines instead of one. Even in its separate existence, however, the point is in no wise sundered or divorced from the lines on which it lies.

The world of particular things formed in this way by the crossing of many Forms was not unreal and illusory; nor yet

[38] *Cf.* Burnet, *op. cit.*, pp. 161 ff. [39] *Cf.* Burnet, *op. cit.*, pp. 164 ff.

was it a detached copy of the Forms. Sensible objects were rather mixtures and confusions of Forms, in which no one essence could appear entirely or clearly owing to the crowding of the others. Hence particular things, although partaking with all their heart and soul and strength of those essences and drawing all their being from them, appeared incomplete and imperfect in comparison with the purity and completeness of the Forms in themselves. And they impeded the desire of the soul to know and possess reality at the same time that they excited it.

In this way, we are told, Socrates tackled and tried to solve the problem of Appearance *vs.* Reality. If we are right in crediting him with an argument ordinarily charged to Plato, we must regard him as not only the originator of a famous theory of knowledge and explanation of the origin of "value," but also as no inconsiderable metaphysician. And we must of course make still another material alteration in the traditional view of Plato and his relation to Socrates. But whichever view we may feel inclined to adopt, we must remember that we are dealing with an open question, and that the newer hypothesis is by no means universally accepted or the older wholly undermined.

We have now the two portraits of Socrates before us. Fortunately it is not incumbent on us to say which is the better likeness. We have only to compare them, once more note the points in which they agree and differ, and pass on. Over their representation of the outward man we need not linger, since they are alike. We are already sufficiently familiar with the ungainly figure with the snub-nose and the protruding eyes, likened by Alcibiades to a Silenus, but possessed for all that of an extraordinary personal charm and fascination. We have seen him strutting like a water-fowl about the streets and the market-place; or discoursing on love and putting Aristophanes to bed at Agathon's dinner party; or, yet again, conversing with his intimates about the immortality of the soul on the day of his execution. In the background of both pictures we have watched the same crowds of young men trailing after

him, an eager and laughing audience keen to lose no word of the persistent and ruthless questioning and cross-examination with which he wrung from them and, more delightful still, from their elders and betters, a confession of inconsequence and ignorance. And we have noted the graver disciples and friends who stood by him to the end.

Both portraits are also one in their description of the beauty and the nobility of the inner man enclosed within this grotesque and genial exterior. His kindness and tolerance with others, his strictness with himself, the strength of his convictions, his devotion to his principles, the courage and self-sacrifice that bade him die rather than relinquish them—all these are as striking a feature of the one as of the other picture. Again, to whichever we turn, we find the piety, the mysticism, the trances, the voice that admonished him, his belief in the Gods and their overruling Providence guiding all things to some good purpose, his faith in immortality, his preoccupation with the destiny of the soul and with the problems of moral conduct and the good life.

The same man, intellectually, looks down at us, too, from either portrait—with his shrewd, active, witty mind, his intentness on running things to earth, his keenness in detecting the slightest hint of speciousness or inconsistency or ignorance in answer and argument, his unwillingness to accept half-explanations or to be put off short of the whole truth. Finally, no less clearly drawn in the one picture than in the other, we find the characteristic inductive method of sifting general and authoritative definitions out of the confused and seemingly irreconcilable opinions of mankind. There is the same dialectical process of question and answer and comparison of views, in the course of which all interlocutors are slowly but surely backed towards a central point of common agreement.

But here the coincidence ends. From the one representation we get the impression of a man, not only disgusted with previous and contemporary systems, but disillusioned as to the ability of philosophy to discover any world-ground whatsoever or do more than enlighten men regarding the character of their

own best interests and the conduct necessary to fulfill them. We are disappointed, indeed, at his readiness to substitute for philosophic inquiry and speculation a naïve and unpondered faith in the immortality of the soul, the existence of the Gods, and their providential ordering of all things for the best. And we have to regret, not only the narrowing of Socrates' mind and interest upon the single problem of human conduct and ideals, but also a singularly bourgeois and Philistine lack of perception in solving it, which tends to ignore civilization and to accept law, order, and prosperity without elegance, refinement, and beauty, as sufficient for the full measure of the sovereign good. When all is said and done, the eyes that look out at us from this portrait are blank, blind as they are to the charms and claims of the Muses and the Graces, and focused in short-sighted content upon the homely virtues as the only necessary and desirable consorts of a well-lived life. Yet for all that, this picture is in most critics' opinion the truer likeness of the man.

The eyes of the other Socrates—the Orphic and the Pythagorean philosopher painted by some recent critics—are quite different. They are very far away and dreamy. The expression of aversion from people like Anaxagoras and the Sophists is there, to be sure. But it is not the aversion that a childlike piety and unargued faith might feel from skepticism or materialism. The look is fixed more profoundly upon a new system and a new world-ground that it has discovered. It penetrates the world of sense and appearance with its earnest scrutiny to find there, not blank nothingness, as did the Sophists, nor yet atoms moving in the void, but rather a heaven of Pythagorean Forms, justice-in-itself, courage-in-itself, temperance-in-itself, and the whole host of virtues and qualities, august, perfect, universal, eternal, unchangeably the same in all things, times, and places. This new Socrates sees, too, that particular objects draw all their reality from sharing in these pure and changeless essences, and that without them the sensible world would relapse into blankness without form or name. But he knows also that since individual things participate in many Forms they can possess none clearly or wholly, and hence must

appear as the incomplete and confused members of a multiple and changing world.

Moreover, with the fascinated gaze of the Pythagorean mystic, and possibly of the Orphic initiate, the other Socrates has a vision of the soul moving before birth among these heavenly Realities and bringing down into the tomb and prison of the body "shadowy recollections" of their nature and vague yearnings for their perfection, which are stirred and kindled by her contact with the things of sense. To his eye it is now plain how knowledge is possible and what it really is, and whence the soul receives her inductive power of perceiving the similarities in objects of sense. He understands how she can compare and classify them, and recognize and name their Forms. Again, he sees why we have not only minds but hearts as well, comprehends the true meaning and aim of our "first affections" and natural impulses, and is able to lay down authoritatively what the discipline of love and desire must be, if man is to regain his birthright and attain his true good. This good, far from being the middle-class content, righteousness, and prosperity of the more conservative portrait, lies beyond even the Graces and the Muses in the mystical contemplation of the immaterial essences of which Reality is composed. The way thither is not a way of vulgar worldly success, nor yet of the enlightenment and perfection of human life within the fourscore years and the loveliness of this green earth that are its physical limits. It is an inner way, heedless of external fortune, undisturbed by bodily and worldly desires, uncaptivated by the beauty of outward things and of the vision of all that man can do and be in the short span before death closes all. He who follows it is intent only on loosening the ties that bind the soul to the body and to material things, and on so schooling her that she may profit by the release of death to escape from the "weary, sorrowful wheel" of birth and rebirth and enter into uninterrupted communion with the divine.

But whichever picture be correct—whether we regard Socrates as a metaphysician, or as interested only in ethics and logic and willing to take the Gods and immortality on simple faith; and again whether we consider his ethics as representa-

tive of the "orthodox" Hellenic attitude towards life or as "the continuation of the religious side of Pythagoreanism, the Olympian contest of eternal life against the world, the flesh, and the devil" [40]—Socrates was really only a pioneer of a new interest and a new movement in philosophy. His development of argument by question and answer and of induction was, indeed, a considerable contribution to the growth of logic; and we may regard him as perhaps the father of ethics as a separate study and science. And again, if he is to be credited with taking over the Pythagorean Forms in a logical rather than a geometrical sense and with composing his Reality of the formal definitions or natures of things, to him rather than to Plato must be attributed the first shifting of the accent of reality from Matter to Form, and the first attempt to conceive the world-ground, not as concrete stuff, or even as a substance endowed with motion and life and consciousness, but as something wholly abstract and immaterial.

Still, Socrates' real mission after his death as during his life was to be a philosophic gadfly stinging men on to fresh thought and speculation. His failure to reply satisfactorily to the new questions that he had raised gave philosophy a fresh opening and incentive. His theory of Reality, if he had one, gave a novel vista and created problems heretofore unsuspected by suggesting that the Nature of Things might be immaterial. The doctrine of the participation of sensible objects in Form, if it is his and not Plato's, revealed another aspect of the case of Appearance *vs.* Reality. The theory of recollection evoked a thousand perplexities as to the possibility of knowledge and its relation to truth and Reality. His mystical ethics propounded rather than overcame difficulties, since the abstract Forms of the Good and of the several virtues needed, as Plato soon realized, to be stuffed with some sort of concrete application to life before they could be made relevant to human nature. One had first to be sure what man was really after, what he wanted, and what contented him, before one could determine just what Form the good would take.

Nor does it help us, so far as his ethics are concerned, to

[40] Taylor, *op. cit.*, p. 266.

revert to the view that Socrates took no interest in metaphysics, but was a moralist pure and simple with a tendency to fall back upon the Sophists' ideal of the good. For the statement that the goal of moral conduct is material success, or even that it is virtuous living, arouses a suspicion in thoughtful minds that means are being mistaken for ends, and raises rather than answers the question of the real aim of human life. Even, then, considered as a hard-headed practical student of ethics with no mystical nonsense about him, Socrates sets a problem instead of solving one. He confronts us with the difficulty of finding out the things which the human organism naturally pursues as ends in themselves, not as means to anything beyond them, in the possession of which it finds its final satisfaction and peace. But his scattered analyses of different moral qualities and his attempt to make knowledge the principle of unity and the essence of all the virtues afford no key—or keyhole—to the difficulty.

Socrates, in a word, ushers us into the future. His doctrine of definitions or universals, and still more of Pythagorean Forms, if he held it, his dialectic, and his theory of knowledge as recollection lead us directly to Plato. And in their mystical form his ethics might well stimulate more mysticism, and in their practical aspects could not but provoke immediate attempts to break through the vicious circle of definition by synonym and fill in the Form of the Good with a definite content drawn from a study of human life. These developments of moral theory will form the subject of the next chapter.

## CHAPTER III

# THE MEGARICS, CYNICS, AND CYRENAICS

### I

### THE MEGARICS

As we saw in the last chapter, Socrates bequeathed to his followers some philosophic property but an equal if not a larger legacy of debt in the shape of difficult and unsolved problems. He had asked and raised novel and irritating questions, but he had answered none satisfactorily, even though we credit him with the Pythagorean doctrine of Forms, the theory of knowledge as recollection, and the vision of the Good set forth by Plato in the *Republic*. His disciples could not begin to live on what he had left them. Indeed, they had to make their own way in the world with a great amount of unfinished business on their hands. But they had been left with enough to see that they could make more, and to feel that if they could succeed in winding up their master's affairs and paying off what he owed they would be rich.

To Socrates' credit stood the fact that by his ironical method of argument through the cross-examination and dissection of his opponents' views, and by his sure though painful extraction of straightforward and generally accepted definitions from their muddled and contradictory replies, he had fostered, if not actually sired, logic and had set it up in life as an independent and flourishing philosophic concern. Again, by bringing his relentless search for knowledge to rest in the apparently final and universally accepted definitions that he had discovered beneath the confusion and antagonism of individual opinions, he had started a theory of knowledge which promised much and must inevitably egg men on to ponder still further

upon the meaning of such terms as "knowledge" and "truth." He had also fomented a revolution in metaphysics if he really taught that the proper object of knowledge and repository of truth were to be found in the Pythagorean Forms, and that Reality itself was not a stuff but something immaterial and abstract. And finally, his restriction of the search for clear and universally received definitions to the sphere of human conduct, and his teaching that virtue lay in knowing what was good for man, pushed the question "What is the good?" into the limelight. Pressed and guided by his fatherly hand, ethics made a bold début and an immediate hit upon the stage of European thought, where thenceforth it was to play to an admiring public the rôle, now of leading lady, and again of the watchful nurse and confidante or the stern and admonitory duenna.

Still, Socrates had done little beyond altering the course of speculation and starting it on its new way. He had shifted, we might say, the stream of thought from its old bed worn deep through successive strata of world-stuffs, and had diverted it towards other channels whose direction he had roughly indicated. But the meanderings of these channels were so vaguely marked, and they were as yet such shallow depressions in the substance of Greek philosophy, that it remained for them to cut their new paths and make their own beds in a comparatively untouched soil.

## II

Among the older and more devoted disciples of Socrates was a Megarian named Euclid. His city and Athens, to be sure, had been on the worst possible terms short of open war ever since 446 B. C. In that year Megara, without any real grievance, had broken away from the Athenian alliance and protectorate which she had formerly sought of her own free will, and had aligned herself with the hostile Peloponnesian group, thus depriving Athens of an important strategic frontier and exposing Attica to easy invasion from the Spartan coalition. This ill-feeling had culminated, just prior to the Peloponnesian War, in an Athenian decree forbidding any

Megarian to enter or do business, not only in the capital, but in any port of the Empire. Euclid, however, was so attached to Socrates that even in these harsh circumstances and at the peril of his life he persisted in secretly entering Athens disguised as a woman in order to visit his master. He was present, too, at Socrates' death thirty-three years later, and it was at his house in Megara that Plato took refuge when some of the better known and more prominently associated disciples, particularly if they belonged to the aristocratic party, found it prudent to leave Athens for a while.

But Euclid served two masters. He was also of the Eleatic persuasion, and his admiration for Parmenides was only second to his love for Socrates. The result was that he attempted to fuse the Socratic and the Eleatic teachings. He held firmly to the Parmenidean doctrine that Reality was one, simple, and unchangeable. He believed that the plurality, the difference, the variety, the restless change, the motion, the ceaseless coming into and passing out of being, with which the sensible world about us was everywhere flickering and shimmering, were all unreal and non-existent, the figments of false opinion. And he drew the Eleatic conclusion that the senses, which unrolled before us this film of dream and illusion with its passing show of many, rainbow-tinted, interchanging and dissolving shapes, were altogether deceitful and untrustworthy. Thought and reasoning alone could acquaint us with Reality.

The words that Euclid had from Socrates' lips seemed to him to supplement and throw more light upon this Parmenidean teaching. He had heard him say, year in, year out, that thought and reasoning could not be assured of knowing what a thing really was until they had discovered the general class to which it belonged. All that was real in an object, then—or in other words, all its Eleatic Being—might well appear to lie in the logical definition or form that gave it its nature and made it what it was. Everything else—its concrete particular existence, its material substance, its seeming flesh and blood—was but illusion. That the Eleatic "Way of Truth" led to such a Reality must have impressed Euclid all the more clearly if Socrates himself under Orphic-Pythagorean influence had pushed on into metaphysics and declared that class-

concepts or Forms, which, in his opinion, were the goal of knowledge, were also the very essence of the universe.

Furthermore, Socrates' absorption in ethics had tended to make him lose sight of all classes or forms except those of moral qualities such as justice-in-itself, courage-in-itself, temperance-in-itself and the like. And he had introduced as a principle of unity among the virtues their common knowledge of what is good, suggesting at the same time that the object of that knowledge—the Good—was correspondingly one. It was not unreasonable to argue that by rights there could be only one real and final class-concept or Form in the Socratic philosophy—the Form of the Good.

Socrates, then, to one bred in the Parmenidean tradition might well seem to be tottering on the brink of Eleaticism. And conversely, Parmenides, though he had apparently conceived Reality as a compact ball of simple and unchanging material substance, had so denuded it of physical qualities that he might strike an admirer of Socrates as verging upon a definition of Being in terms of mere Form. His sphere, when deflated of all tangible content, seemed about to collapse into a pure abstraction, an immaterial roundness-in-itself. One had only to substitute the Form of the Good for that of the sphere in order to bring the Eleatic into line with the Socratic teaching. And this was perhaps all the more easily effected by Euclid in view of the aesthetic perfection of the spherical form to the Greek eye and the fusion of the aesthetic and the moral in the Greek mind. To be round was to possess already a good form.

In any case, whatever the precise train of Euclid's thought may have been, it led him to the conclusion that the Socratic good possessed all the earmarks of Eleatic being. The Good was single, simple, homogeneous, unchanging, always the same. What was it then except *the* One, the sole Reality? Men might call it by many names, to be sure, such as Wisdom, God, Mind, and the like, but these were mere tricks of speech. Nothing but the Good really existed, and anything opposed to or different from it was a matter of false opinion and illusion.[1]

[1] *Cf.* Diog. Laert., II, x, 106. Zeller, *op. cit.*, pp. 222 ff. Gomperz, *op. cit.*, Bk. IV, 8, § 2.

Of anything further that Euclid may have said about the nature of either the One or the Good we have no record; and, as matters stand, both concepts seem to have remained quite bankrupt under his receivership and to have gained nothing in the way of tangible properties and assets from being merged. For to define the Good as the One and the One as the Good, and to say nothing more about either of them, added nothing to our knowledge of the nature of either the Good or of Being. It may be, indeed, that now and then Euclid caught himself thinking of the Good as something solid and round, for it is difficult to think without imagery, and the Eleatic sphere was the only image to which he had fallen heir. But to envisage the Good as globular would have been no great step in advance. However, there is one point at least to Euclid's credit, and that an important one; he was, barring a perhaps Pythagorean Socrates, the first philosopher whom we find distinctly on his way towards conceiving Reality not as a world-stuff but as something wholly immaterial. And as such he helps shift the accent of Reality from Matter to Form and leads us on towards Plato and Aristotle.

The followers of Euclid devoted most of their time and effort to playing, though with no great stakes or winnings, the new and delightful game of logic. They noisily discussed, for example, whether or not we can be said to be lying if at the time we admit that we are; and whether a man whom we see but do not recognize can be said to be known to us. They were further responsible for such questions as our familiar catch of asking, "Have you left off beating your grandmother yet?", and the puzzle "How many hairs must a man lose to be bald?", or "How many grains does it take to make a heap?" —a catch with which we are perhaps best acquainted in the well-known problem of determining at what point a horse that is fed one less wisp of hay a day will eventually starve. Much of this of course was mere quibbling for the sake of quibbling, but the fact that hair-splitting and wrangling became all at once so philosophically smart testifies to a wide-spread and rapidly growing interest in logic as a distinct and independent branch of thought, to be cultivated of it-

self for the delightfully intriguing character of its special problems.

Moreover, it must be said in justice to the Megarics that the puzzle about the hairs of the bald-headed man covered a really clever argument, originated perhaps by Euclid himself, against the real existence of the manifold and varied world of sense and of the stuff of which the older philosophers had said that the universe was composed. The Many, it was held, could not really exist because it was impossible to determine logically the point at which the Many, as contrasted with a few, came into existence; witness the insuperable difficulty of telling when a number of grains turn from a few into a heap. The Many, then, since reason could issue them no birth certificates, could never have been born and therefore did not exist. This argument was supplemented, apparently, by a demonstration that the infinite diversity of a world-stuff made it equally impossible to find any end to the Many and therefore to count and define, or even to reach, the manifold constituents of which a material world must be made. Hence the Many and matter could not be objects of knowledge, and for that reason could not have any real existence.

In much the same vein the Megarics attacked the possibility of motion, chance, and annihilation and examined the concept of possibility itself. In the main they followed the Eleatic arguments and particularly the paradoxes of Zeno, but they made their position more untenable by admitting, like Melissus, the reality of time, with its differences of past, present, and future. As a result, they were forced to grant the reality of the altered aspects and places of things from moment to moment, and found themselves compelled to accept the *fait accompli* that a change had occurred from one day to another although it was logically impossible that such a change could occur. Their admission of the reality of time also led them to modify the Eleatic, and for that matter the older Megaric, view that, since the one and only Reality was once and for all finished and unchangeable, it was a contradiction in terms to talk of Being that was merely possible but not actual, and to say that a capacity that was not realized was nevertheless

real. From this point of view the range of the possible was strictly limited to that which existed as a matter of fact, and conversely everything now non-existent was also forever incapable of existing. The later members of the School, however, had to take the reality of the future into their calculations, and to concede that the capacities of the possible were not all realized by what was actual at the moment but also really held whatever the morrow might bring forth. But they re-stiffened Reality by declaring that nothing could happen otherwise than it did, thus excluding from Being any flexible, undetermined element of chance. Along with this interest in the problem of possibility went considerable curiosity about the implications of the conjunction "if," and about the relation of hypothetical and conditional statements to truth.

Among the followers of Euclid we need only mention by name Stilpo, a late contemporary of Aristotle's. He made, to be sure, no innovation of importance in the Megaric doctrines, but he conjoined with them the ethical teaching of the Cynics, to which we are about to turn. Moreover, even if he himself did not blend the two philosophies into a system, the combination was effected by his pupil Zeno, the founder of the Stoic School. We may therefore conveniently keep Stilpo in mind as a connecting link in the evolution of ancient thought, through which the characteristics inherited from Euclid and Antisthenes were transmitted to one of the great philosophers of the Greco-Roman period.

And now let us turn back to the disciples of Socrates of a less metaphysical turn of mind, who confined their investigations largely to ethics and endeavored to find out what their master really had meant by virtue and the good.

## III

### THE CYNICS

Antisthenes, the founder of the Cynic School, was already a man of mature years when he fell in with Socrates. He was born at Athens early in the latter half of the Fourth Century, the son of an Athenian citizen and a Thracian slave woman.

In his youth he had been a pupil of Gorgias and in friendly relations with other well-known Sophists, and had himself instructed in the art of worldly success and appeared as a pleader in the lawcourts. He had also seen military service and shown himself a brave soldier. But after he met Socrates the old loves were quickly forgotten. Although he lived at the Peiraeus, some five miles from Athens, he used to tramp every day to town and back in order to visit his new found master. And he, too, like Euclid, is mentioned by Plato as among those present at Socrates' death.

In spite, however, of his fidelity he cannot have been a favorite member of the Socratic circle. He seems to have been a rough, stupid, and obstinate man, disdainful of the amenities of existence and lacking the intellectual brilliance that sometimes compensates for want of manners and refinement. And he was already accentuating these unsympathetic traits by affecting the severe and uncouth rule and ways of life for which the Cynics were afterwards noted. Socrates had been simple and casual enough in his habits and dress, but Antisthenes went him one better. He ostentatiously carried a beggar's staff and wallet as a sign of independence of spirit and lack of worldly possessions, which he thought all wise men should cultivate. Like his master he persisted in wearing on all occasions the coarse Spartan cloak used by the Athenians only for military purposes, and considered by them quite the reverse of smart for civilian dress. But he pushed simplicity even further by dispensing with an undergarment and merely folding the mantle in two thicknesses to make good the deficiency. The more ragged a mantle he could display the more manly he felt himself—which once prompted Socrates to say to him, "I can see your vanity through your cloak." [2]

With two at least of his fellow-disciples we know that he was not on the most cordial terms. He had an almost puritan terror of enjoyment, and was horrified at his comrade Aristippus' view that, according to Socrates, pleasure was the goal and justification of moral action. "I had rather go mad than feel pleasure," is reported to have been one of his favorite

[2] Diog. Laert., VI. i, 4, § 8.

exclamations.[3] Plato, too, he rubbed the wrong way. The latter refers to him as a doddering "old man, too old to learn,"[4] and more than one story has come down to us testifying to their sharp disputes over the Platonic view that Reality is composed of immaterial Forms, and to the quickness of wit with which the younger man parried the blundering attacks of his opponent.

After the execution of Socrates Antisthenes went back to teaching. He felt, as every disciple generally does, that he was the one of all others really to understand Socrates' inmost thoughts, and he devoted himself with all his might to expounding them. Just out of Athens there was a school called Cynosarges open to the children of citizens and foreigners, who were technically bastards because of the Athenian law forbidding mixed marriages. Here Antisthenes, being himself technically illegitimate, established himself. If anything, he discouraged disciples by his disagreeable, even brutal treatment of those who sought to attach themselves to him, and by the harsh novitiate of the over-simple life through which he put them. It is uncertain whether the term "Cynic" comes from the Greek word for dog, referring to the veritable "dog's life" which Antisthenes and his companions deliberately tried to lead, or from the Cynosarges school in the precincts of which they habitually met.

Better known to posterity than Antisthenes is his pupil, and in some ways his opposite, the humorous, original, self-willed, and austere Diogenes. He was a young counterfeiter who had been forced to flee his native town of Sinope in Asia Minor and had taken refuge at Athens. He became attracted to Antisthenes by whom, it is said, he was at first beaten off with a stick, but his persistence won out in the end and he was received as a disciple. Once accepted, he abandoned himself to Socratic simplicities with such extraordinary fervor that he won for himself the title of a "Socrates gone mad." He dispensed with a house and lived in a tub, and was found in broad daylight wandering the streets with a lantern searching for

[3] *Ibid.*, VI, i, 4, § 3.

[4] *Sophist*, 251 B. (*Cf.* Deussen, *Philosophie der Griechen*, p. 201.)

somebody worthy to be called a man. He had begun, too, by drinking water from a cup, but the sight of a child drinking from its hand had shamed him from such artificiality and shown him the simple and more natural way. But the oddity of his behavior could not conceal a sterling character, and perhaps accentuated an unusual personal charm and winning manner. When he spoke, we are told, he laid a magic spell upon his hearers.[5]

Diogenes, however, was not destined to end his eccentric career in Athens. Pirates carried him off one day when he was crossing to Aegina and eventually sold him into slavery. The purchaser, a rich Corinthian, made him the steward of his household and the tutor of his children. These situations he filled in so satisfactory a manner, and so won the respect of his owner and of his erstwhile charges, that later when he was freed he was invited to live with them, and made his home with the family until his death.

He took also to expounding his philosophical views in public again, gathered about him an audience and a following, and became one of the chief sights and boasts of Corinth. Indeed, when Alexander the Great was passing through the city, he paid a special call upon the old man, whom he found lying basking in the sun. With royal condescension he asked what he could do for him. "Stand a bit out of my light, will you?" replied Diogenes. The king meekly complied, exclaiming, "If I were not Alexander, I'd like to be Diogenes." [6] By a curious coincidence the two men died on the same day in 323 B. C. Though he had forbidden his friends to make any fuss about his body, the Corinthians gave their philosopher a public funeral and built for him a tomb surmounted by a dog of Parian marble. And Sinope, whose coinage he had counterfeited in his youth, erected a monument in his honor.

One more member of the school, Crates of Thebes, must be mentioned before we pass on to a consideration of the Cynic teaching. He was the most famous of the followers of Diogenes, by the magic spell of whose words he was bewitched into

[5] *Cf.* Diog. Laert., VI, ii, 10, §§ 75–76.
[6] *Cf. Ibid.*, VI, ii, 6, §§ 32, 38.

giving away a fortune of nearly four hundred thousand dollars and adopting the austerities of the Cynic rule. His most marked peculiarity lay perhaps in his habit of forcing his way into the houses of the well-to-do and rebuking the inmates for their way of living—from which sociable custom he got the name of "door-opener."[7] Something of Diogenes' fascination and silver-tongue must also have descended upon him, for not only did he inspire a *grande passion* in a rich Thracian girl, who, in spite of the opposition of her family, took to the Cynic life for love of him and finally persuaded him to marry her, but to cap the episode he also converted his new brother-in-law.

The Cynic School lasted as an independent organization for another century, but its better features and the better men who might otherwise have embraced its tenets were appropriated by the far finer Stoic philosophy. In its later years it was but a shadow and caricature of its former self. Even in its earlier and more vigorous phase the search for the state of nature, the cult of absolute simplicity, and the scorn for everything that could be considered in any wise artificial or superfluous, had led to a contempt for even the most cherished and venerable human institutions, such as marriage and the family for example, and to a nakedness of conduct that struck the ancients themselves, in spite of their genial and liberal standards, as improper and shameless. It is from the Cynic's disposition to sneer at everything that most men hold sacred that the word "cynic" as we commonly use it has become in some measure a term of reproach. And it was this husk of exaggeration and extravagance, apparently, that lingered after the old, serious spirit had fled, for of the two last lights among the school of whom we have any record one was a Phoenician ex-slave, a mere lip-server of a money lender and miser, who hanged himself when he lost his fortune, and the other, a superstitious charlatan who used to go about got up in the dress and mask of a Fury declaring that he had come up out of hell to keep an eye on sinners and report their doings to the powers below.[8]

[7] *Ibid.*, VI, v, 1, § 86.

[8] *Ibid.*, VI, ix, 1, § 102.

Now the Cynics led this queer life of theirs, which made them such striking figures of the times, in the name of Socrates. When they took to their tubs, drank out of their hands, wandered the streets like mendicant friars with ragged cloaks and the beggar's staff and bowl, and paraded in public the more intimate concerns of the private life, they did it for his sake, and believed themselves simply to be putting his preaching into practice. And when they poured out their scorn upon even such amenities of existence as education and culture, and defied and sneered at the social conventions and institutions of their day, they felt that they were but driving home his message to the world. It is then with some curiosity that we ask what this theory of theirs was regarding the true inwardness of Socrates' teaching, which inspired their strange behavior and gave them the assurance to prescribe it as a panacea to all men.

It is not easy to answer this question with any clearness or certainty. The works of Antisthenes, which were highly esteemed but so voluminous that he was called by an ill-disposed critic a "universal chatterbox," [9] have all been lost, and from the gossipy historian, Diogenes Laertius, and the other commentators we can get no complete or definite account of his teaching. Nor are we any better off, so far as first-hand knowledge of the other members of the School is concerned. But the evidence is sufficient to assure us in the first place that the Cynics' attention was focussed on morals, and that their interest was engrossed in answering the questions, "What is virtue?", "What is happiness?", "What is the good?", to which Socrates' replies had been so inconclusive.[10] Antisthenes' native lack of broadmindedness and of philosophic curiosity, as well as his earlier Sophistic environment and education, predisposed him to share his master's contempt for speculations that led only to world-stuffs, and even for any scientific inquiry whose results were not immediately useful to human life and favorable to moral conduct. The same influences must also have blinded him to any possible Pythagorean mysticism that, as we have seen, may have lurked in Socrates' views.

Moreover, the harshness and illiberality of Antisthenes' mind

[9] *Ibid.*, VI, ii, 9, § 18.

[10] *Ibid.*, VI, viii, 9, § 103.

would seem also to have prevented him from viewing even ethics scientifically, and from following the dispassionate and carefully reasoned methods of treating the subject that Socrates had employed. His moral theory was inspired by sentiment rather than by thought and reflection. His austere and unsocial nature, independent to the verge of savagery, instinctively admired and selected what he conceived to be similar characteristics in his beloved teacher; and he leaped without looking to the conclusion that these qualities were the fruits by which the true significance of the Socratic doctrine was to be known. It was, he felt, Socrates' simplicity of life, his few wants, his superb indifference to the things to which the run of mankind is enslaved by desire and fear and avarice and ambition, that had kept him so calm, so cheerful, so upright, so foursquare to the blows of fortune, so imperturbably happy even in the drinking of the hemlock. But if this independence of spirit was the secret of Socrates' virtue and goodness, was it not also the key to his theory of the nature of virtue and happiness? We would seem at last to have found the answer to our question. Virtue was simply the knowledge and cultivation, happiness the possession, of this inner strength of character and peace of mind which the world could neither give nor take away.

The central and all-important concept, then, in the Cynic ethics was that of indifference and independence in the face of external circumstance. Any other attitude towards the world, they felt, put human happiness at the mercy of conditions over which man had no control. But if only we knew how to maintain our composure and serenity unbroken by destiny, then we were in truth the masters, not the slaves, of whatever fate might bring. The lesson of indifference, the training of the "unconquerable soul," was difficult, to be sure, but all men were free and able to learn it, if only they would. And once taken to heart, it deprived the stings and arrows of fortune, however outrageous, of their power to wound, and made man invincible and his happiness secure. This stern gospel of independence on the world, with its harsh call to steel one's happiness, through indifference, against whatever life might have

in store, became, in a more kindly, a more urbane, and a more healing form, the great message of the Stoics, who infused it also with the soft and consoling belief that all things are really for the best and contribute somehow to the perfection of the universe as a whole. And with or without this added touch of piety, it provides again to-day, not only a haven in which almost all thoughtful minds seek refuge, for a while at least, at some time or other in their journey, but also a final anchorage for many a drifting and weary soul who has found no sure bottom elsewhere to the sea of life.

From this central idea of the good as indifference and independence in the face of external circumstance the Cynic ethics radiated. Since we can accustom ourselves to going without things and can cultivate independence, virtue can be taught, as Socrates had said; and since, as the Sophists had pointed out, what is once known is never forgotten, or, in other words, since what has become habitual is a fixed part of oneself, virtue is a permanent acquisition when once it is learned. Seeing, too, that the same attitude of indifference to external circumstance inspires all the acts, however diverse, of every virtuous man, Socrates was right in insisting that virtue is one, not many, and that it is the same in all sorts and conditions of men. Moreover, in view of the fact that educating oneself to a calm and indifferent attitude is practically the same as attaining it, and that hence to be virtuous is to be happy, we can say that virtue is to all intents and purposes the same as happiness and that it is an end in itself. Hence the famous Cynic doctrine of "virtue for virtue's sake," which we shall do well to fix in our memory, along with independence and imperturbability, as one of the watchwords of the sect.

It would be wrong, however, to regard Socrates' teaching as the sole inspiration of the Cynic doctrine. Antisthenes, it will be remembered, had begun his philosophic career as a Sophist, and his early training seems to have ingrained in him a feeling, which the influence of Socrates never eradicated, that all human standards and institutions are purely relative, and that there are as many truths and ways of being virtuous and happy as there are individuals. He had no patience, as we

have already seen, with the Platonic view, perhaps also to be attributed to Socrates, that Reality is composed, not of concrete particular objects, but rather of the abstract and general classes of which these objects are the incomplete embodiments and fleeting instances. Even Socrates' desire to construct a scientific ethics by comparing large numbers of individual cases of conduct and drawing from them general rules and definitions left him unsympathetic and uncomprehending. This Protagorean twist to his thinking not only colored his moral theory but influenced deeply his views on logic and the possibility of knowledge. And we shall perhaps understand his ethics better, if we stop now for a moment to inquire what those views were.

Antisthenes' logic and theory of the nature of reasoning and knowledge radiated, like his ethics, from his doctrine of self-sufficiency and independence. He was sure that different individuals, if they were really different and really individual, could not possibly be covered by the same definition, partake of the same nature, and have identical qualities and predicates. Each particular object had rather its own distinct and unique character and place, and was entitled to its own special, private definition and to treatment on its own merits. It was literally the only case of its particular kind. Its form, its nature, its properties, belonged to it alone, and were not shared with anything else. My type, for example, was not your type; my nature was not your nature; my goodness or badness was not of the same quality as yours, and could not be defined by the same terms. That both our natures were called "human," and that your acts as well as mine were called "good" or "bad," meant, not that they were the same in essence, but merely that at first glance they looked alike. To take such superficial and chance likenesses seriously, and to try to make the same definition do for one object as did equally well for another, was to destroy the self-sufficiency and independence of both objects alike. To put me in the same class with you, was, if that class was a real thing, to merge me with you and to reduce the two of us to a couple of instances or manifestations of one and the same nature.

The general headings, then, under which we grouped par-

ticular things, and the common forms and types which we attributed to them, could have no real existence and could give us no true knowledge. They were mere artificial confections built up out of the most casual and surface resemblances. They might make a specious pretense at telling us what an object was like, but they failed to pry into and detect its individual nature—its private home life, as it were—and tell us what the object really was. To call John Smith a "man," for example, added nothing to our knowledge of him. To know the real John Smith, we must rather know the peculiarities that set him apart from all other so-called "men" and made him his own unique self.[11]

The views that we have just been setting forth were to make a stir in the subsequent history of logic and epistemology. New and curious vistas in the theory of knowledge were opened by Antisthenes' flat contradiction of the socialistic metaphysics, so ardently defended by his young confrère Plato, that what is real, valuable, and sacred in individual things is not their private lives and properties but the general type which they share with other members of the same class. The Cynics' insistence upon the unreality and non-existence of such attenuated and abstract things as universal types and forms, and their teaching that class names are mere nicknames and tags, as it were, indicating nothing of the true nature of the individual object, make them, along with the Cyrenaics, the first exponents of the famous "nominalistic" theory that the names of general concepts are mere "breathings of the voice" which find no echo either in any impression existing in the mind or in any objective reality. And their battle with Plato over this point was the beginning of an endless dispute which raged with theological violence during the Middle Ages in the so-called Realistic-Nominalistic controversy, and which, in one form or another still agitates modern thought.

If the reports of Plato and Aristotle are to be trusted, Antisthenes drew from his "nominalism" rather startling logical conclusions. In the first place, since each individual object is independent, self-sufficing, and unique and cannot be

[11] *Cf.* Zeller, *op. cit.*, pp. 251–256.

put in the same class with any other, it proves impossible to say that one thing is true of another. We cannot, for example, attribute goodness to man, and make the statement "Man is good." For to say that man is good would be to put man in a class with other good things, like sugar and temperance, and make of him merely one among many instances of goodness in general. That is, it would make him belong to a class other than his own, and would thus destroy his independent, distinct existence and nature. We can only say, then, that man is man, and good is good; or, in other words, drawn from the vocabulary of logic, we can pass only "identical" judgments upon things. "Synthetic" judgments, in which, by predicating one thing of another, a number of things are put together and made to intersect, as it were, in the same object, are out of the question. But "synthetic" judgments are precisely those by which we learn more and more about an object and advance and increase knowledge generally. Merely "identical" propositions are as useless as they are undeniable. Antisthenes, then, when he denied the possibility of predication would seem to have rendered knowledge impossible as well.[12]

Again Antisthenes was forced to admit that, given his premises, there could be no such things as contradictory propositions. Take John Smith, for instance. We have already seen that nothing except his own form or nature can be predicated of him, and that we may therefore say of him, not that he is "good," or "white," or even that he is a "man," but only that he is John Smith and nothing else. But if that is the case, where is there any possible ground for contradiction in our statements regarding him? If you and I both say that he is John Smith—and this is all we can say about him and keep to the point—we agree. If, however, you say of him that he is good, and I, that he is bad, we are not really predicating contradictory qualities of *him*, since nothing can be properly said of him except that he is John Smith. We are rather dragging him into an entirely irrelevant description, on your part of goodness, on mine of badness. Neither of us is talking any longer about him, or about the same thing. But if we are not

12 *Cf.* Plato, *Sophist*, 251 A.

talking about the same thing, we cannot possibly be contradicting each other.[13]

It follows, as Aristotle points out, that it is impossible to make a false proposition of any sort. For if we say that a man is a man, or an apple an apple, we are saying something so true that it is tautological. And if, in addition, we still attempt the impossible and persist in saying that man is good and the apple red, all that we have really succeeded in doing is to repeat, "Man is man, apple is apple," and to add, "Good is good, red is red," which are equally tautological statements. In the same way every so-called false proposition, however outrageous and absurd it may appear, turns out merely to be a couple of tiresome truths which have nothing to do with each other. To say, for instance, that the moon is made of green cheese acquaints us merely with the self-evident fact that not only is the moon the moon, but green cheese is green cheese.

To see Antisthenes losing himself in these logical blind alleys was naturally most pleasing to both Plato and Aristotle, who delighted in exposing the fallacies in a point of view so inimical to their own teaching. But these fallacies need not further detain us. We may remark, however, in passing, that like the Megaric quibbling, although in a much more serious and weighty manner, they testify to the rapidity with which logical problems were coming to the fore. And they show particularly, taken in connection with the bitter dispute between Antisthenes and Plato, how acute the question of the possibility and meaning of predicating one thing of another had suddenly become for the thought of the day.

But Antisthenes' heart was as little in logical inquiries and problems as it was in investigations of the nature of the universe, except so far as they helped point a moral and adorn a tale of conduct and happiness. His interest was in ethics and ethics alone; and it is to this side of his heritage of Sophistic relativity and individualism that we now return. The moral pointed by his theory of knowledge was plain. In practice, as in logical theory, the individual, not the group, must

[13] *Cf.* Aristotle, *Met.*, V, 29. Top I, 11. (Alex., *Schol. in Arist.*, 832.) *Cf.* Plato, *Euthydemus*, 286 A, quoted by Zeller, *Socrates*, etc., p. 255, note 1.

be the real unit of human life. Conventions and institutions, family and country, society and the state—everything, in a word, that seemed to bind individuals together and to make them depend upon one another and really share one another's lives—had no more basis in nature and in fact than did the general classes and universal forms and types about which Plato was making such a fuss. Human society was a no less artificial figment than human nature in general. As the one was suggested by superficial likenesses between Tom, Dick, and Harry, so the other rested upon an equally superficial agreement between their interests and actions. To attribute, therefore, a real moral authority to human institutions, and to stake the virtue and the happiness of the individual upon his relation to them, was all of one cloth with the foolish assertion that particular objects are nothing but instances of general types and that the individual man owes all the existence and character he possesses to a share of "universal" human nature. No; Tom, Dick, and Harry and all the rest did not depend for their virtue and happiness upon their relations to one another or upon social conventions, usages and institutions, to say nothing of more material conditions. Each one of them came naturally outfitted with all that was needed for doing right, being good, and attaining peace and contentment. The individual could be virtuous and happy in and by himself. The Sophists, then, seemed to agree with Socrates in teaching that the secret of both virtue and happiness lay in severing every tie that might bind a man captive to external circumstance, and their influence tended to confirm, if anything, the faith which his precept and example had excited.

With their twice baked and crusty doctrines thus firmly fixed in their minds, Antisthenes and his School now proceeded to sit in judgment upon their world. Naturally they found it in a bad way. They saw the great majority of mankind clinging for dear life to all sorts of forms, institutions, conventions, and even material conditions, which rendered them hopelessly dependent upon one another and their surroundings for virtue and happiness. That a modicum of such dependence had to be endured the Cynics, to be sure, were forced to admit. Man

must eat and drink, reproduce his species, and wrap and shelter himself from the weather. But even the plainest waiting upon these bare necessities of existence might seem to compromise his dignity and mar the detachment and severity of his inner life. And the slightest unbending, the least interest or feeling of pleasure in satisfying them, made him their slave. As matters stood, however, instead of leaving these fortunately few but unluckily imperative wants naked and serving them grudgingly, man had devoted himself to their comfort, heart and soul, and made of them his masters. He had multiplied them, organized them, complicated them, clothed them, refined them; in a word, he had burdened himself at their behest with what we euphemistically call "civilization." Without all these adjuncts and extras and useless ornamentation he could not feel respectable or successful. As a result his standards of conduct were all astray and his peace of mind was in constant danger.

Take the things by which he set great store—material prosperity, wealth, a great name, social position and prominence, fame and glory as the world understands them. They contributed nothing to true and dependable happiness but rather distracted his attention from it. To stake a career upon attainment of them was to put himself at the mercy of fortune. A turn of her wheel and they were gone, leaving him shivering and miserable, stripped of all that had made a shallow, dependent life worth living. Worst of all, though, was that sedentary and enervating sport, the pursuit of pleasure and the consequent dodging of hardship and hardihood, which poisoned life with feverish desires and unworthy fears and left it flabby and sensitive to the slightest rough handling. And of all pleasures those of love were the most upsetting to true peace of mind.

With the forms and institutions to which the ordinary notions of virtue and respectability were attached the Cynics had as little patience. The whole organization of society was artificial, superfluous, wrong, a hindrance rather than a help to the really good life. Marriage and the family, for example, were needful neither for a due satisfaction of the wants of sex

nor for the propagation of the species. They were therefore unnatural and useless encumbrances to the living of a virtuous life. The same was true of the civil and political constitution of society. All forms of government were equally bad.[14] The mass of mankind, to be sure, might need leading-strings like statutes, regulations, and rules. But let them all become Cynics and live according to the dictates of virtue. Constitutions and laws would then be unnecessary.[15] Nationality and patriotism also were wholly artificial and trumped up. A man was a man, wherever he occurred, and the relations between human beings had nothing to do with accidents of geography. The wise man would ignore such petty and provincial distinctions and be a cosmopolitan. His country was the whole world. In like manner he would ignore all social distinctions, which were as baseless and trumpery as national ones. Even slavery rested upon a wholly artificial ground. Some men, to be sure, were by nature slaves and some rulers; but true freedom and slavery were moral—matters of wisdom and folly—and had nothing to do with any man-made institution.[16]

The economic order, also, had no more rhyme or reason for the virtuous Cynic than the political and social structure of the day. Wealth was not only unnecessary but harmful to virtue and happiness. A medium of exchange like gold was one of the roots of all evil. If there must be a coinage, let it be of bones or stones.[17] Better still, however, would be the direct barter of the products of honest toil. All men should be poor, all should work, living only by the sweat of their brows in emulation of the twelve-times laborious Heracles, man's true patron saint and model.

Finally there was the question of religion. Like everything else in human life it had been cluttered with forms, traditions, conventions, and institutions, and had become a hindrance rather than a help to simple, natural, and virtuous living. Man had created a host of Gods in his own image, and had made

[14] *Cf.* Diog. Laert., VI, i, 4, § 5, *ibid.*, § 8; ii, 6, § 50, *ibid.*, § 72.
[15] *Cf. Ibid.*, VI, i, 5, § 11.
[16] Zeller, *op. cit.*, pp. 274–275, 276, note 1.
[17] Athenaeus, IV, 159.

images and temples, and formal cults and worships, in their honor. But such religion was mostly folly and superstition. Its Gods were mere popular fictions. Its ceremonial was empty show, its temples had no particular sanctity. Its vows and prayers, prophecies and interpretations of dreams, were ridiculous. For its consolations the truly free and independent man could have no use. For him there was, if anything, only one God, to whom wisdom was a sufficient introduction and virtuous living an adequate service. To walk and talk with him it was necessary only to follow the Cynic rule.[18]

Such monumental vice and folly then, as the Cynics saw everywhere smothering and consuming the world about them, called, it seemed to them, for a drastic operation. Palliative and halfway measures would not do. There was nothing for it but to go to the root of the evil and cut in its entirety the cancer of human civilization out of human existence. Only thus could mankind be restored to true virtue and happiness which the artificial growth and vicious refinements of organized society had so nearly destroyed.

To their self-appointed task of converting the world the Cynics devoted themselves with indefatigable zeal, preaching and practicing the simple life with great ostentation, courting publicity on every occasion, and advertising their gospel far and wide by their extraordinary behavior. But their words fell for the most part upon deaf or derisive ears. Like the traditional missionary to the heathen, they dispensed too much rum and clothing with their Bibles, and destroyed what they had come to save. Their ideas were too far-fetched and too befuddled a hodge-podge of the sensible and the absurd to prove more than a counsel of perfection, except for a few select souls. Plato, though he, too, had a scheme for reforming society and agreed with certain points in the Cynic prospectus, like the communizing of women and children, denounced the plan as a whole as fit only for a herd of swine.[19]

Nor were the Cynics themselves all of one mind as to what had best be done. Antisthenes, for example, admitted that marriage was not an unnatural way of reproducing the species

[18] Zeller, *op. cit.*, pp. 278–279.

[19] Plato, *Rep.*, II, 372.

and was therefore permissible, whereas Diogenes would have none of such an artificial institution. And Crates, it will be remembered, was very reluctant to submit to the conventions and go through the form of a legal wedding with the enamored Thracian lady who eventually ran him to earth. Again, it had to be admitted that even the devilish word "pleasure" could quote Scripture on occasions, and quite respectable ones at that. The enjoyment that one got out of the Cynic life, the relish of food and drink and sleep that simple living brought,[20] the delightful sense of fatigue and ease when one came home to one's tub after a hard, healthy day's work, the pleasure of despising pleasure, and the voluptuousness of the feeling of unruffled and purring complacency, could not with any humor or consistency be called bad. Again, if it be true that Diogenes praised justice, as Socrates praised temperance, on the ground that it was a means to mental and even physical pleasure, he was perilously close to the Cyrenaic teaching, which so shocked Antisthenes, and to which we are about to turn, that pleasure is the end pursued by all men and the justification of moral conduct.

Although the bizarre and exaggerated features of Cynicism may have failed to commend its particular doctrines to the world at large, they helped at least to startle the public into an appreciation of some of the possibilities of the new, young actor, Ethics, so lately taken up and introduced upon the stage by Socrates, and to secure for it an increasing *réclame*. The revolt that they advertised so luridly against cut and dried morality and established social, political, and economic institutions could not but make more and more people wonder just what conduct, after all, was right, and what organization of society, after all, was best. Nor were all their revolutionary ideas mere passing fancies. Their attack on slavery and nationalism, their insistence that true worth is no respecter of persons or social distinctions and that true citizenship is not of a particular country but of the world, made them the forerunners of much in Stoic and early Christian social theory. The Stoics were to emphasize cosmopolitanism and assert the

[20] Xen., *Symp.*, IV, 34.

equal citizenship of all human beings, be they emperors or slaves, in the "dear city of Zeus." The Christians were to preach the universal brotherhood of mankind as the children of one Father, whose souls were equal in his sight. To-day, nationalism *vs.* internationalism is still a live and burning issue. Slavery is only just dead. And the Cynic political and economic "heresies" bear a family resemblance to our Communism and Bolshevism.

Moreover, whatever we may think of the revolutionary applications of the Cynic teaching, we cannot deny that it contained much sound, practical doctrine which any age might well take to heart. It is no mean ideal, although it may be a disputable truth, to hold that happiness is something within the reach of all men irrespective of every accident of birth, fortune, and external circumstance, and that no man need be deprived of it by any adversity that fate may bring. Again, the frugal, sturdy rule of life which the Cynics inculcated has much to recommend it, in spite of its grotesque features. It is a valid and needed protest, to-day as yesterday, against overcivilization and too much aestheticism and delicacy on the one hand, and too much hidebound morality and "British respectability" on the other. Its very coarseness and its brutal contempt for polite fictions and white lies, not to speak of other shams and non-essentials, are a well-deserved rebuke to two kinds of people of whom the world is always full—the flabby and super-refined who cannot possibly be happy unless every convenience is at hand, and the prigs and the prudes who oblige virtue as well as truth to go clothed to the ankles in form and convention.

But even the strong points of the Cynic teaching and the sound advice that it gave were bound up with grave weaknesses in the theory upon which they rested. The counsel of independence and self-sufficiency, admirable in itself, was inspired by an individualistic view of human nature which will not bear scrutiny. It is bad psychology, we now feel, to consider the individual man the primitive, basic unit of human life and to regard social relations and organization as derivative and superficial. Mankind is not a chance collection, as it were, of

human atoms, each one of which is turned out complete in itself, fully equipped with every device necessary to carrying on an independent moral career and attaining a special brand of happiness in splendid isolation. It is composed rather of lives each one of which is infinitely divided and scattered among a myriad others and is indistinguishably commingled with them. Human beings are by nature dependent, not independent, both on one another and on the physical environment which produces and fosters them. They are welded solidly into one another's lives and happiness by a thousand mysterious, unbreakable links of interest and sympathy and affection, which far antedate, it would seem, the emergence and semi-detachment of individual self-consciousness, self-love, and private interest. It needs but a panic, a mob, a war, to remind us that our separate personalities are mere *parvenus*, existing only by sufferance and likely to be stampeded at any moment by the old, collective brute passions and instincts of the crowd, with its blind fears and hatreds and violence, its heroisms, its self-sacrifices, its loves than which no man hath greater. In a word, not the particular man but a social organization of some sort is the natural and primitive unit of human life. Institutions are less derivative and superficial growths, if anything, than individuals.

Again, it may be timely and to the point to show man the folly of encumbering his existence with too much moral bric-a-brac, and to exhort him to simpler, more direct, and more natural living; and it may be a real step forward in the shaping of ethical theory to try to find the fundamental needs of human life and base one's rule of conduct and idea of happiness upon them. But the Cynics overdid the distinction between the natural and the artificial, the necessary and the superfluous, when they solemnly clove with it to the very bowels of the moral order and made it the dividing line between good and evil. In doing so, they were, to be sure, quite in the fashion of their day. As we saw when discussing the Sophists, it tickled contemporary Greek thought to oppose things existing "by nature" to things existing by "custom" and "convention," and to attribute to the former a greater importance in human life.

But to the modern eye these distinctions have little significance for ethics.

In the first place it is doubtful whether such a line may be drawn at all, except as a rough and ready classification which, far from indicating any sharp or profound cleavage in things, scarcely scratches their skin. All things are according to nature, as the Stoics were so soon to find out, and the means, which the Cynics would have called "artificial," invented by man for protection, adjustment, survival, and gratification, are really of a piece with the modifications of structure and environment that occur in the give and take between the lower organisms and their surroundings. For example, knife and fork are as "natural" products of evolution as tooth and claw, and Buckingham Palace and the White House are no more "artificial" than a bird's nest or a beaver's dam.

The distinction between the superfluous and the necessary is no less superficial. Man, being an animal that dies or goes mad if put in solitary confinement, needs companionship and mutual aid quite as much as he does food and drink. Being likewise more subtle than any beast of the field, or for that matter than the serpent itself, he is as necessarily possessed of curiosity, ingenuity, and an aesthetic sense, as he is of a stomach, and his craving to explore, exploit, refine, and deck out his wants is no less imperative than his impulse to satisfy them. Moreover—and this, also, the Cynics failed to see—it is just these extra wants and this added touch of subtlety, far more than any peculiarity of conformation, that mark out man from the other anthropoids and entitle him to a genus and a life distinctively human. As well call the bird of Paradise to account for not having the severely simple and unembellished plumage of the crow, or blame the ant for the artificiality of its hill and the nightingale for the needless loveliness of its song, as reprove for being parasitic and superfluous, the comfort and the luxury, the gaiety, the amenity, and the beauty, the forms and the institutions, and all the rest of the furniture of civilization, with which man has adorned and distinguished his life.

In the second place, granting that a clear distinction can

be made between the natural and the artificial, the necessary and the needless, and accepting the line as the Cynics drew it, we may wonder whether the good does not after all lie more often on the side of the unnatural and the superfluous than on that of the natural and the necessary. For ethics, it would seem, is concerned primarily not with what man needs but with what he wants; and the desires that go to shape the vision of happiness far outrun the bare necessities of existence. If, then, we were to attempt to lay down beforehand the nature of the good, we should be inclined to say on general principles that the best life for man, and the life that he naturally desires and needs, would be, not, as the Cynics said, the plainest on which he can subsist, but rather the richest that he can digest. His diet must, of course, be balanced and must include many of the things recommended by the Cynics, such as independence, hardihood, and an even mind proof against misfortune and disappointment. It is a silly and vicious point of view that thinks that human life can be supported on moral sweetmeats and soft drinks. But a man can go to his sleep feeling he has dined better and no less wisely, if a cocktail, *hors d'œuvres*, dessert, and so much champagne as he has the head for, have had a place in his menu. To confine virtue to moral bread and water, not to speak of restricting in any case the good to virtue alone, is a food fad pure and simple in ethics. It is to ignore the omnivorous character of man's moral appetite and digestive apparatus and the complex and highly organized nature of the life that he instinctively craves and feels to be best for him. Cyrenaicism, which allowed for our love of enjoyment and refinement and laid stress upon the tonic effect of pleasure, was in this respect a much more rational and satisfactory theory than Cynicism. It may have fallen perhaps into the opposite extreme when it made pleasure the sole and deliberate end of all moral conduct—as if one should say that man, like a spoiled child, could be coaxed into eating his dinner solely by the hope of the sweets he would get at the end, if only he would eat the rest like a good boy—though this point is still open and debated by moralists. But the Cyrenaics at least looked before they leaped to hasty conclusions about what was best

for man. They studied human nature in a much more liberal and tolerant spirit than did the Cynics, and they consulted man's likes and dislikes before laying down the laws that in their opinion should guide his conduct and ensure his happiness. And even if pleasure is not the only end at which good behavior is aimed, it is indisputably an important object of human desire and a keen incentive to moral action; and the love of it sweetens a goodness that otherwise is apt to be tasteless and unmellowed, and sometimes even acid and distasteful. Let us, then, pass from the Cynic ethics with all its nobility, its severity, its uncouthness, and its downright absurdities, to a further and closer study of the genial Cyrenaic teaching that pleasure is the sole goal and motive of a moral life.

## IV

## THE CYRENAICS

The Cyrenaic doctrine reflects even more strikingly than the Cynic the personality and circumstances of its founder. Straight across from the southernmost promontories of Greece the African coast, as if in answer to those far-away, beckoning Peloponnesian capes, suddenly rises from the midst of league on league of sand-bar and shallow waste of shifting dune, and for a space of a hundred and fifty miles thrusts out into the sea a mass of low, dome-shaped mountains. The more eastern, inferior ranges retain to some degree the barrenness of the embrace of beach and desert from which they spring on the dreary Marmaric shore; and the treeless southern slopes fall away in ever scantier wheatland and pasture to the Libyan sands. But the sea-face of the western mountains was celebrated in ancient times as a veritable garden of the Hesperides. Here the great downs shelved to the Mediterranean in a couple of tablelands, part forest, part open park and grass and rich tillage, furrowed here and there with deep, lush watercourses, and indented at their base with coastal plains of tropical luxuriance. Screened from the hot winds of the desert by the higher crests, and open to the sea-breezes, these northern terraces enjoyed a variety of tempered and equable climates; and as one mounted

from plateau to plateau one passed through every gift of vegetation from tropical groves of date palms to forests of northern oak. All sorts of flowers and fruits and vegetables could be cultivated in abundance, and eight months out of the year were harvest time. So verdant, so lovely, so sudden and gracious in the midst of the melancholy and endless sands, are the terraces of these fair hills, that even to-day they are known to the desert-tribes as Jebel Akdar or the Green Mountain.

Halfway along this smiling coast there is an open bay with good anchorage, sheltered to the east and west by jutting headlands, and backed by a thin strip of plain. Behind, the hills rise sharply, first to a narrow terrace, and then to the broad tableland that caps the range. Here on the edge of the upper plateau, at an elevation of eighteen hundred feet and some ten miles from the Mediterranean, Greek colonists from the island of Thera founded in 631 B. C. the town of Cyrene. And here two hundred years later Aristippus was born.

By that time the original settlement had grown into a rich and splendid city. Its walls and towers, the battlements of its Acropolis, the gleaming marble of its temples and colonnades, floating high in the blue sky above the groves and hanging gardens of the mountain ridge, were a landmark far out to sea. On the shore below, deep in the curve of the bay, lay the busy port of Apollonia, so called by the Cyreneans after the God whose oracle had led them to this promised land. A broad road connected the city with its harbor, descending through a vast necropolis, past the splendid tombs of the dead, to populous and bustling suburbs and lovely orchards and gardens, and so to the sea. Down it wound all the varied wealth of the country for export to the ends of the Mediterranean world. The wharves were piled high with jars of wine and olive-oil and honey, and sacks of wheat and baskets of almonds, dates, figs, and truffles, and every sort of fruit and vegetables. Great heaps of ostrich plumes there were, too, and saffron flowers for the making of delicious perfumes, and the rare and celebrated silphium plant, now extinct,[21] and even at that time found no-

[21] The Italians, however, who now occupy the Cirenaica, believe they have rediscovered this plant.

where else, whose stalks were used as fodder, and whose resinous gum was in much esteem and demand for medicinal purposes with the physicians of antiquity. Or, it might be that some trader was loading his ship with horses of the famous Cyrenean breed, whose victories in the chariot races at Olympia had been sung more than once by Pindar.

Moreover, the Cyreneans could gather in and dispose of the protracted and easy harvest of all this wealth in comparative peace and security. The sea at their feet was one vast market for their wares. Nor could they in their commanding position be easily attacked from it. Their flanks and their rear were covered by the desert, which had so far protected them from all outside interference except one brief moment of incursion and domination by the Persians. They had found no difficulty in keeping the native tribes in order. They had no violence to fear except their own internal disorders, which, although frequent and bloody, do not seem to have interfered seriously with their business or affected their prosperity.

From a people of such easy life and so privileged by nature and by fortune we might expect a certain mellowness and even softness of moral outlook. Nor should we be surprised to hear that by the ancients they were reputed to be pleasure-loving and luxurious. Certainly Aristippus was by nature both. Born of a wealthy family at the moment when Cyrene was at its best and richest, he fell heir to all the advantages and disadvantages that ease and money bring. He seems to have been a genial, clever, sweet-tempered youth, a "good mixer" with every kind of company, very fond of having a good time, and naturally inclined and able to keep pace with the other rather fast young clubmen about town. But he was also intelligent, ingenious, and resourceful, and, though apparently not a man of great courage, he had a presence of mind and quickness of wit that generally enabled him to do the right thing and give the right answer at a critical moment. And his ability to get on well with all sorts of people developed into considerable skill in getting out of them what he wanted. All in all, if to his adaptability, his intellectual gifts, and his talent for managing men, we add a composure of manner and a strength

of mind and will that made him the master rather than the slave of his likes and dislikes, his passions and his prejudices, we may feel that if Aristippus had not become a philosopher he would have made a brilliant diplomat of the old school, and in modern times, at least, would have died an ambassador many times over.

Just when and how he became enamored of philosophy we do not know. Perhaps he was first acquainted with its charms by the Sophists, who can scarcely have omitted so choice and plump a plum as Cyrene from their pickings. In any case their doctrine must have been current there, for the well-known mathematician Theodorus, who was one of the intellectual lights of the city and later a teacher of Plato, was a friend of Protagoras. And when Aristippus came to develop his own system he showed a strong leaning towards the Protagorean teaching. From Theodorus, too, who was also a friend of Socrates', he doubtless heard of the stir raised at Athens by the latter's teachings.

But it seems to have been during a visit to the Olympic games that Aristippus' fate was sealed. There, we are told, he heard from a friend a full account of Socrates' personality and teaching, by which he was so ravished that he could scarcely wait to get to Athens and see and hear for himself so delightful and interesting a man. The meeting made of him a confirmed philosopher and one of Socrates' most devoted followers, and he was quickly received into the little circle of the more intimate friends and companions. He was, however, absent in Aegina at the time of the trial, and for some reason did not hasten back, as we should have expected of so close a disciple, to say farewell to his master and stand by him till the last.

After the execution Aristippus lived on for a time at Aegina. But during his discipleship he seems to have begun to teach on his own account, and it is even said, though the account is not altogether trustworthy, that he had already scandalized his fellow-pupils by following the Sophists' custom of asking fees for his instruction, and by offering a portion of his earnings to Socrates himself. However that may be, it was not long before he adopted the Sophists' mode of life, taking to the

road, teaching as he went, and charging his pupils five hundred to a thousand drachmas per head.[22] These sums were a pleasant increase to his inherited wealth and satisfied an interest in adding to his income to which he frankly confessed. Restless and cosmopolitan by nature, and with little attachment to any particular spot, he wandered for some years, establishing himself in one place after another only to move on. We hear of him, although we should not perhaps believe all we hear, at Megara and Corinth, and in Asia Minor and Sicily. Gossip has it that he visited the court of Dionysius at Syracuse, where he was shown every discourtesy by the tyrant, to which he retorted with some of the best of his many *bons mots*. He is also said on this occasion to have had a tiff with Plato, who earlier in his career had taken on the unenviable job of tutoring the thirty-year-old, but quite uneducated Dionysius to reign in his father's stead, and was for the moment again in Sicily trying to patch up a quarrel between the tyrant and his uncle and quasi-guardian, Dion. Little reliance, however, can be placed in these tales. Finally, Aristippus went back to Cyrene and set up a school of philosophy. Presumably from that time on he made his native town his headquarters, and eventually died there. But of that, as of the date of his death, we know nothing for certain.

It is traditional that the Ethiopian cannot change his skin or the leopard his spots, and however much Aristippus' mind may have been developed and his interests crystallized by his friendship with Socrates, his character was little modified. He underwent none of the moral and almost religious conversion that appears, as we shall presently see, to have occurred in Plato. He was born a man of the world, a man about town, a good fellow who loved a good time, and these genial and *mondain* traits he carried with him to the grave, if we may believe the many racy anecdotes about his pleasantries and gallantries. A nature more unlike Antisthenes' it would be difficult to imagine, and it bears witness to the inclusive personality and the inconclusive teaching of Socrates that two men, so opposite in character and conviction, should have found in him

[22] About $100 to $200.

a concrete model and a philosophic justification for such divergent ways of meeting and dealing with life.

And Aristippus, it might seem, had as much right on his side as Antisthenes. For Socrates, despite the strictness, the inner aloofness, and the robust independence and self-sufficiency upon which the Cynics had seized, enjoyed life thoroughly, accepted gladly its invitations, dined and wined gaily if discreetly at its board, and generally made the most and the best of all it had to offer. He was never awkward and uncertain of himself in the company of pleasure, never, like Antisthenes, turned red and shocked, and wished himself anywhere else, and even mad. He was, rather, always sympathetic, graceful, thoroughly at ease, a good listener to its claims. It was this general willingness to associate with the ordinary amusements and pleasures that come in a man's way, this gaiety, this power of enjoyment, this lack of moral snobbery, upon which Aristippus fastened as the true result and justification of Socrates' rule of conduct and the key to virtue and happiness in general. Socrates was a living example of how to be good though happy. His independence, his serenity, and his imperturbable content had been won, not by shunning pleasure and affecting a callous insensibility to external circumstances, as that sour Puritan of an Antisthenes so foolishly thought, but, on the contrary, by being so interested in everything that went on, so broad and deep in his power of getting pleasure from common things, that, whatever happened, there was always enough left to enjoy and be content with.

But it was not merely Socrates' personality that seemed to show that goodness and the enjoyment of pleasure might go hand in hand. Much in his teaching gave support to such a view. There were times, we may remember, when he seemed to cut loose for a moment from the vicious circle involved in defining virtue as knowledge of the good, and to realize that the question "What is the good of being virtuous?" was still pressing for an answer. And so far as it did occur to him that virtue might not be an end in itself, but had to be justified as the necessary means to some higher goal, he seemed inclined to find this goal in the increased pleasurableness of life ensured,

in his opinion, by good behavior. For instance, Xenophon, there is some reason to believe, wrote his recollections for the express purpose of whitewashing his master from the charges of being irreligious and a bad moral influence.[23] But strait-laced, pious, and Mid-Victorian as he was, he did not blush to represent Socrates as praising continence and temperance on the ground that they kept the capacity for enjoyment fresh, keen, and unjaded, and as saying that the goodness of virtue in general lay in the fact that its practice gave more pleasure than did that of vice.[24]

These suggestions, vague, tentative, and incomplete as they were on Socrates' part, were a revelation to Aristippus of the true nature of morality. Like Antisthenes, he believed that he was the only one who really understood his master. Nothing could be clearer than Socrates' real meaning. The better you were, the better time you had; and conversely the better time you were having, the better you were. Every action was really aimed at the attainment of pleasure, and morality was nothing but the ordering of one's life in such wise that one might always enjoy it.

In his new gospel, Aristippus was quick to draw material from every side, even out of the mouths of babes and sucklings. It did not need the wise man, reflecting upon the meaning of happiness and carefully analyzing the motives behind his conduct, to discover that what all men sought, consciously or unconsciously, was pleasure. The fact was plain to every infant and for that matter to every animal. The pursuit of pleasure and the avoidance of pain were only too obviously the two great driving and controlling forces in the behavior of all sentient beings from the moment of their birth. Pleasure, then, was the normal and instinctive good, the good established and indicated by Nature for all her creatures. Let Antisthenes prate about a man's living a simple, normal, natural, and healthy life. Very well! What could be more simple, more normal, more natural, and more healthy, than to obey the most fundamental and imperative dictate of Nature and seek enjoyment? Not to seek it was a sign, not of virtue, but of a perverted and un-

[23] *Cf.* Taylor, *op. cit.*, p. 31.

[24] *Cf. supra*, p. 70.

natural character. Antisthenes' wish, Aristippus might have claimed, had already been granted, and he was already out of his right mind when he had cried out that he had rather go mad than experience pleasure.

In developing their theory that the good is pleasure, the Cyrenaics, like the Cynics, were influenced by the psychology and theory of knowledge of the Sophists. Metaphysics and science they dismissed, like Antisthenes, on the ground that all attempts to investigate the nature of things, such as the older philosophers had made, were aimed at a knowledge that cannot be attained. But logic, they felt, had some bearing upon problems of moral conduct. Their study of logic and psychology, however, led them to give an extra turn of the screw, if anything, to the Protagorean doctrine that "man is the measure of all things." It was not merely that all things were, as the Sophists declared, in such bewildering Heracleitean flux and change that their true nature could not be grasped, and that therefore what appeared to each individual to be true of them was absolute truth, so far as he was concerned. The very term "thing" or "object" was now also taboo. All that we can know, the Cyrenaics said, is our own sensations and feelings. Of any world outside our individual experiences we can have no knowledge whatsoever—not even the knowledge that it is in such Heracleitean flux that it can never be known. The change that we perceive going on about us is nothing but change in our sensations, not change in an external object of any sort.[25] Furthermore, pleasure is just the smooth, pain, the rough and stormy, passage of our feelings; and when there is, as it were, a dead calm, and the movement of our sensations is unnoticed, we are in a state of indifference.[26] So far, then, as the problems of knowledge and moral conduct are concerned, the existence of an objective universe must be absolutely ignored. Each man's sensations and feelings compose for him the only world with which he can acquaint himself and from which he can draw good or evil.

[25] *Cf.* Zeller, *op. cit.*, p. 296.

[26] Euseb., *Praep. Ev.*, XIV, 18, 32. Diog. Laert., II, viii, 7, § 86, quoted by Zeller, *Socrates*, etc., p. 300, note 2.

The implications of this doctrine for logic made the Cyrenaics even more "nominalistic" than the Cynics in their views regarding the contentious question of the existence and validity of class-concepts and general forms, so bitterly disputed between Antisthenes and Plato. The Cynics, we remember, had reduced the common natures in which particular objects seemingly share to empty names founded upon chance and superficial resemblances, which corresponded to nothing really existent and conveyed no knowledge of the things they were applied to. The Cyrenaics, however, pushed on to a more advanced position, summoning to their aid arguments like those employed by Protagoras and Gorgias. When, for example, you and I apply the same name to our sensations, and agree that this is white and that is sweet, we presuppose at least that our sensations are alike. For, obviously, if our sensations have nothing in common, it is misleading and absurd to apply a common name to them. But what grounds have we for supposing that the experiences of different individuals have anything in common? None. They have, so far as we can see, no common object or cause outside themselves to make them similar. And no one individual can penetrate another's mind to see whether the sensations that he finds there are similar to his own. A man can feel only his own feelings; he cannot feel those of his fellows. I can therefore no more ascertain what your feelings are like—what, for example, you really are feeling when you utter the words "white" or "sweet"—than I can what an external world would be like. For that matter, a color-blind person would appear to see "red," not as you see it, but as you see "grey-green." But certainly our voices have no right even to breathe in the same way, and utter the same word, for the purpose of expressing sensations and feelings whose difference or likeness we have no means of testing. When, then, you and I apply the same name or class-concept to a couple of items, one of which is shut up in your experience, the other in mine, we are pretending to a knowledge that we can never possess. In a word, not only are common natures non-existent, as the Cynics said, but common names are without a common ground, however superficial, of any sort. The general term,

the Platonic Form, has no more foundation in fancy than in fact.

The Cyrenaics' application of the dictum "man is the measure of all things" to the field of ethics was no less straightforward and thoroughgoing than it was to that of logic. Since we can know nothing of our sensations we must deal with the goodness of pleasure on the basis of feeling alone. What *feels* good *is* good. Ethics, like the theory of knowledge, knows nothing of an external law or order which might introduce considerations other than those of sensation into our estimate of the goodness of pleasure.

Again, since no man can feel another's feelings and know what his neighbor's sensations of pleasure are like, there can be no comparison of pleasure among individuals, and hence no basis for a universal agreement as to which pleasures are most pleasurable, and therefore best, for all. Nor is it permissible to distinguish between pleasures as higher and lower, better and worse, according to the sources from which they spring. In the first place, there is no valid psychological ground for contrasting the sources of pleasure. We may not oppose, except perhaps superficially, so-called "spiritual" pleasures to bodily enjoyment. For all pleasure is a feeling, and all feelings have to do with the body.[27] The "highest" pleasures are, so to speak, nothing but shivers up and down one's spine. And secondly, there is no ethical ground for any such contrast. The goodness of pleasure is an intrinsic value. It has nothing to do with the kind of thing from which the pleasure is drawn. A flower, we might say by way of example, is none the less beautiful for being grown in a dungheap; nay more, it may be lovelier than one grown in the whitest and purest sand. In like manner, the Cyrenaics would argue, a pleasure is no less good for being grounded in something vulgarly accounted base or absurd.[28] All sources of enjoyment are, without distinction, sources of an equally good life, provided that they give equal pleasure. Wherever we turn,

[27] *Cf.* Diog. Laert., II, viii, 8, § 87, Zeller, *op. cit.*, p. 306.

[28] Diog. Laert., II, viii, 8, § 88. *Cf.* Plato, *Philebus,* 12 D, 13 A; Zeller, *op. cit.*, p. 303.

then, we find no trustworthy standard for judging the goodness of a pleasure except its pleasurableness to the individual who is feeling it. Each man is the measure of the life that he enjoys most; in other words, of the life that is morally best for him.

But now, even when we have located the good in the pleasure of the individual, and have bidden each individual judge the moral value of his acts without reference to any external order, natural or social, and solely by their pleasurableness to him alone, we have not solved the real moral problem. For even the pleasure of the individual, when freed from all outer complications, is not a simple thing all of the same complexion and texture. It is not one but many, and extremely plural at that. We must speak of a man's pleasures rather than of his pleasure, and these pleasures are a motley crew, different in kind, and often at odds with one another. Some are preceded by unrest and rasping desire—as, for example, a drink after too prolonged a thirst—or are followed by an enervating feeling of satiety; others come and go without painful prelude or disagreeable after-effects. Furthermore, they crowd and even stifle one another in their rush and press for satisfaction, and force their pursuer to pick and choose between them.

If, then, the individual is to take pleasure as his mark with any hope of success, he must first decide what kind of pleasure is the most pleasurable, and how far its value may perhaps be offset by the price he has to pay for it. Had he better sacrifice intensity to durability, or take the cash and let the credit go? Is or is not this particular enjoyment worth working for? Are its consequences likely to make it really worth while? Or does it warrant him in taking the chances and putting himself to considerable pains? Again, granting that two pleasures seem equally keen or lasting and alike in their preliminaries and consequences, which shall he choose, if he cannot have both? Unless a man makes allowance for these considerations in taking aim at the good, and is sure that he has picked the best target in the herd of pleasures bearing down upon him, his shot is almost sure to go wild and he to come to grief, trampled under foot by a confusion of joys.

Aristippus, however, stood his ground, and his answer rang out sharp and short. The good, he said, is to be found in the pleasure of the moment alone. It has "nothing to do either with the recollection of past enjoyments or with the hope of future ones."[29] The present pleasure is the only pleasure really felt. Past and future pleasures cannot concern us, since the past are no longer in existence and the future have not yet come into being.[30] Had we reminded Aristippus of memory at this point, he would doubtless have replied that remembering a pleasure does not bring it back, and that the images and enjoyments of memory are nothing compared to the vividness of present feelings. And as to the pleasures of anticipation, so far as they are felt, they are present—but how faint they look in comparison with those actually being enjoyed here and now! Moreover, why waste one's time enjoying the prospect of something that, given the unreliability of events, may never occur? Gambling in future pleasures involves too great a risk. To-day should never be sacrificed to the morrow. The truly wise man will make hay while the sun shines, seizing every pleasure as it comes to hand, careless of its origin and past. Nor, in theory at least, ought he to worry too much about consequences, since he cannot know with any certainty what they will be like.

The drift of Aristippus' argument must now be plain. Durability, being an unknown factor, can play no part in determining the goodness of a pleasure. Immediacy and intensity are the only gauges left. Again, since the most available and the most intense pleasures happen generally to be those of the "senses," the pleasures of the senses are better than those, so called, of the mind.

This conclusion, although it may seem far-fetched and impractical, is a logical and unavoidable deduction from the Sophistic premises on which Aristippus took his stand. The same reasons as prevent one man from knowing another's experience prevent him also from knowing anything but the present moment in his own. For I can no more feel directly my

[29] Athenaeus, XII, 544 (trans. Yonge).
[30] Athenaeus, *loc. cit.* (trans. Yonge).

own past and future sensations than I can your sensations. No amount of remembering or anticipating can make them present experiences, just as no amount of guessing what you feel can bring me into immediate contact with your feelings. Indeed, for all I can certainly know, I may have had no past. My feeling here and now that I have had one may be nothing but an illusion of the present moment. And the like may be the case with the future. In other words, just as the hammer of Protagorean logic smashed the social order to disconnected, individual bits, so it went on to pulverize the life of the individual into scattered, unrelated present moments, each one of which had to be judged on its own immediate merits so far as its goodness as well as its truth was concerned.

But the Cyrenaics were as little able as the Sophists to put their teaching into force. In theory, a man's life might be nothing but a lot of independent instants; in practice, it turned out to be a career in which the future was largely influenced by the present. The future consequences of the present pleasure or pain had, then, to be taken into account by the individual in estimating its goodness or badness for him. Though nothing could destroy the intrinsic worth of an immediate satisfaction, nevertheless the suffering that seemed likely to follow might outweigh its value, and turn it, when all was said and done, from a good into an evil. In like manner, a present pain might be worth enduring because it was more than offset by the future pleasure to which it led. This the Cyrenaics admitted. But in so doing they gave away their case. For the consequences of a pleasure are not confined to the internal, private results produced upon the individual who enjoys it. The effects that it produces upon his neighbors, who do not share his enjoyment, also recoil upon him. And the social consequences and penalties are far more formidable, as a rule, than the petty personal revenge taken by an overstrained organism. For instance, if I drink too much I shall doubtless pay for my pleasure by being sick; but, what is worse, I run the risk of paying a fine or being jailed. It is other people, that is, who complicate the moral problem for me. If I could ignore them and take only myself into account when figuring consequences, the diffi-

culty of being good would almost disappear. The Cyrenaics, then, when they began to talk of results as well as intrinsic values, found themselves willy-nilly reconstructing a moral order and setting up an objective moral standard. They still recognized, to be sure, that nothing is "naturally and intrinsically just or honourable or disgraceful," and that such distinctions are altogether matters of mere law and custom. But they now added that "the good man will do nothing out of the way because of the punishments which are imposed upon, and the discredit which is attached to such actions." [31]

The Cyrenaics back-watered, too, when they approached the topic of physical and mental "pleasures." The psychology of pleasure proved too complicated for them. They confused the things we enjoy with the enjoyment we take in them, and were not sure that the enjoyment of a tragedy or of the prosperity of something other than oneself, as for instance one's country, could be explained on the supposition that pleasure is a purely physical sensation.[32] Morally, also, they admitted that when consequences and circumstances had been taken into account, "mental" pleasure was often in point of all round goodness equal, if not superior, to "bodily" satisfaction.

Again, the admission that the consequences of a pleasure had some bearing upon its goodness introduced the factor of intelligence into morality. The problem of moral conduct became the problem of nicely weighing the present against the future, and of knowing how much antecedent or resultant pain, if pain there must be, a given pleasure was worth. This required a quickness of wit, a breadth of vision, and a depth of insight, such as philosophy was best calculated to foster. Wisdom and philosophy, then, were necessary to virtue, and it was the wisest men, or the philosophers, who naturally led the pleasantest, and therefore the best life. At this point, it will be noted, the Cyrenaics had really returned to the teaching that virtue is knowledge of what is good. But they also thought that they knew what the good was—which was more than Socrates had found out—and thus they broke through the

[31] Diog. Laert., II, viii, 10, 97 (trans. Yonge).
[32] *Cf. ibid.*, II, viii, 8, §§ 89, 90.

vicious circle in which the Socratic doctrine had revolved, and supplemented its inconclusiveness with a definite, scientifically argued conclusion.

The precept and example of Aristippus and his immediate disciples also belied the far-fetched character of their original doctrine, and were, if anything, more edifying than those of the Cynics. Like the latter, the early Cyrenaics preached independence of spirit, freedom from the bonds of religion, a cosmopolitan superiority to political and social ties, a generous indifference to wealth, and cheerfulness, self-control, and equanimity, in all circumstances. But their practice of these virtues, tempered as it was by a different and perhaps sounder point of view, was never marked by the eccentricities and exaggerations in which the Cynics delighted. They prized intelligence and education, the amenities and refinements of existence, and ease and beauty of external circumstance, and understood how dependent life is upon them for its full fruition. They accepted the world as they found it, and tried, not to reform it, but to get the most out of it as it stood. Institutions, laws, forms, conventions, prejudices might be as immaterial and artificial as the Cynics said, and the philosopher would not be fooled or cowed by them. Still, there they were, and it was the part of the wise man to be able in his freedom to adapt himself to them with good-natured tolerance and turn them to his uses, rather than to rise in surly and ill-considered revolt. It may be, indeed, that the Cyrenaics were untrue to the moderation that they advocated, and luxuriated over-much in an easy-going, non-reforming, exploiting attitude. But the perfumes, the fine clothes, and the mistresses with which Aristippus was reproached [33] were no more extravagant than the rags, the dirt, and the promiscuity advocated by Antisthenes. Nor should it be forgotten that the Cynics enjoined as a virtue a laxity in sexual relations—provided of course that one took no pleasure in them—quite as great as that which the Cyrenaics considered it possible to enjoy in a pleasant and well-lived life.

At the death of Aristippus the leadership of his School passed to his daughter Arete, and from her to her son, who

[33] Athenaeus, XII, 63, 544.

bore his grandfather's name. Of the later members of the School we may briefly mention Theodorus, Hegesias, and Anniceris. The doctrines of Theodorus showed that to take the consequences of a pleasure into account in estimating its goodness did not alter the logic of the situation. For, if pleasure is the good, and if all that we have to reckon with besides its intrinsic value is its consequences, a man has only to avoid evil results to himself in order to make whatever pleases him right. If, for example, he enjoys thieving and is in a position to steal with impunity, theft is his good, and none can say him nay. Hence "a wise man may steal, and commit adultery, and sacrilege, at proper seasons: for that none of these actions is disgraceful by nature, if one can put out of sight the common opinion about them which owes its existence to the consent of fools." [34] Religion, like popular morality, was in Theodorus' eyes an opinion dependent upon a like consent, and he attacked Gods of every shape and description with a vigor that won for him the title of "atheist" and all but got him into serious difficulties at Athens.[35] We ought also to remark that he pushed the doctrines of self-sufficiency and cosmopolitanism to the extent of declaring that even such a general and international social relation as friendship was unnecessary, except as a temporary means to some higher, self-centred end.[36]

Theodorus, however, proved to be something of a sheep in wolf's clothes, after all. To him, as to the Apostle Paul, all things were lawful but some were not expedient. Far from availing himself of the privileges of the wise man, he made much of the virtues of prudence and justice,[37] and complained that the pupils who found his teachings subversive misunderstood him, taking, to use his own expression, with their left hands what he had given with his right.[38] He also insisted no less strongly than Aristippus on the part played by intelligence in securing a pleasant life; and the importance he attached to it, together with his almost Cynic enthusiasm for

[34] Diog. Laert., II, viii, 13, § 99 (trans. Yonge).
[35] *Ibid.*, II, viii, 15, § 101.
[36] *Ibid.*, II, viii, 13, § 98.
[37] *Ibid., loc. cit.*
[38] Plutarch, *De Tranq. Anim.*, 5.

self-sufficiency, led him to modify very considerably the doctrine that the good lies in pleasure. For the pleasure of the moment he substituted general joyfulness of disposition which could be reached by the use of intelligence, whatever external circumstances might be like, and which could be maintained, even when one was in pain, by the exercise of a little philosophy and common sense. In this teaching that the good lies in a frame of mind rather than a feeling, and that the wise and virtuous man is indifferent to outer conditions, Theodorus seems both to veer towards the Cynics and to anticipate the views of his contemporary, the founder of the Epicurean School.

By Hegesias Cyrenaicism was given a new and unexpected twist. He started firmly enough with the orthodox opinion that the good lies in pleasure and pleasure only, and that even seemingly spontaneous feelings like gratitude, friendship, and beneficence spring from the desire to get all that one can for oneself. But now, if life is aimed at pleasure, it is forever missing its mark and defeating its own end. The body is afflicted with many sensations, painful as well as pleasurable, and "the soul feels with the body and is troubled, and fortune brings to naught many of our hopes; wherefore happiness does not exist." [39] The highest good, then, that one can hope for is not pleasure but freedom from pain.[40] And this more modest goal can be reached only by cultivating so utter an indifference to all that life brings that one does not even care whether one lives or dies.[41] Nay more, since we are generally frustrated, whatever good we seek, and since there is far more suffering than there is enjoyment in the world, we may argue that the sooner we are dead the better. This teaching got Hegesias the nickname of "Death's Advocate," and apparently he urged it with an eloquence that outdid even Crates' feat of converting his brother-in-law. For, Cicero tells us, "he is said to have been forbid by Ptolemy [42] from delivering his lectures in the

[39] Diog. Laert., II, viii, 9, § 94 (trans. Yonge).

[40] *Ibid.*, II, viii, 9, §96.

[41] *Ibid.*, II, viii, 9, §§ 94–95.

[42] Ptolemy I, Alexander's general, who seized Egypt after his master's death, and made himself king. Hegesias apparently was sojourning at Alexandria.

schools because some who heard him made away with themselves."[43]

By this pessimistic and almost Cynic road Hegesias and his followers returned to the Socratic doctrine that no one ever does evil intentionally. And this they suffused with an atmosphere of compassion, curiously Buddhistic and Christian in feeling. Wrong-doers should be forgiven because they know not what they do. They are passive objects, the victims of circumstances beyond their control. One should not hate them but should try to teach them better.[44]

Anniceris, however, was much more cheerful in his outlook on life, and, like Aristippus, thought that the good could still be found in the pleasure of the individual moment. There was no such thing, in his opinion, as an end at which one's life as a whole was aimed, but each separate act had its particular goal which lay in the enjoyment resulting from it.[45] He perceived nevertheless what the other Cyrenaics had failed to see—that man is instinctively a social animal, and that the welfare of others may be as immediate a cause of pleasure to him as his own sensations.[46] Hence he opposed the theory of the self-sufficiency and cosmopolitanism of the wise man, held by Aristippus and the other branches of Cyrenaicism, and maintained that such things as "friendship and gratitude, and honoring one's parents, and doing one's bit for one's country," had a place in life, not only because of their personal advantage to the individual, but because they expressed and satisfied the "innate benevolence" with which every human being was naturally endowed.[47] These views are curiously and prophetically like those of modern Utilitarianism, of which, as a matter of fact, Anniceris may be regarded as the remote progenitor. Again, it was in line with the same train of thought to feel that the rôle of intelligence in moral conduct ought not to be unduly exalted. Reason, he felt, is not so authoritative as to justify

[43] Cicero, *Tusc.*, I, 34 (trans. Yonge).
[44] Diog. Laert., II, viii, 9, § 95.
[45] Clement Strom., ii, 417 B, quoted by Zeller, *Socrates*, etc., p. 329, note 1.
[46] *Ibid.*, ii, 417, quoted by Zeller, *Socrates*, etc., p. 330, note 2.
[47] *Cf.* Diog. Laert., II, x, 96, 97.

one in being absolutely self-confident in setting one's private judgment above general opinion.[48]

In tracking the later Cyrenaics we have overstepped somewhat our epoch. Before they died, indeed, the theory that pleasure is the good was receiving a new and more famous formulation at the hands of Epicurus, whose system lies beyond the scope of the present volume. Let us then retrace our steps, and, before turning to Plato, audit the Cyrenaic accounts and summarize the chapter on the development of philosophy with which we have been dealing. To begin with, we may credit Aristippus with being the first to give a reasoned, scientific account of the nature of the good, founded upon a deliberate and unbiased observation of human nature. Again, his conclusion that the good is pleasure makes him the father of all the "hedonistic" theories, which have played so imposing a part in the history of ethics, and still challenge denial in their modern form of Utilitarianism. New vistas, also, not only in ethics but in psychology were opened by the conviction of which, to be sure, the Cyrenaics did not always have the courage, that, whatever the source of a pleasure might be, the seat of it was the body, and that therefore the distinction, still popular to-day, between "physical" and "mental" or "spiritual" pleasures was mere rhetoric. No matter what we enjoy, we might say, be it a kiss, a good dinner, the contemplation of beauty, the discovery of truth, or the Beatific Vision itself, the enjoyment itself is an organic disturbance more or less definitely located, and even in the most "spiritual" cases lying in a certain catching of the breath, creeping of the backbone, and glowing and coursing of the blood. The Cyrenaics, then, were not so far from the modern theory, of which William James was one of the originators, that the emotions, instead of preceding and exciting their characteristic bodily expressions, are really the feeling of the physical changes in the muscles, viscera, respiratory system, etc., that take place spontaneously and immediately in the presence of the disturbing stimulus. For instance, I do not run away because I am afraid, but my fear is my feeling of my running and of the other organic re-

[48] Diog. Laert., II, x, 96.

actions in scalp, heart, pit of the stomach, and the like, inspired by the fearsome object.

Finally, the limit to which Aristippus pushed his hedonism in declaring that the good is the pleasure of the moment helps throw into bold relief the fact that, unless one invokes some supernatural reason to the contrary, pleasure of any sort and from any source is always *intrinsically* a good, and that whatever evil may happen to be associated with it is incidental to its results and not to the enjoyment of the sensation itself. The stress on the moment, likewise, excessive though it may be, is a salutary correction to the opposite and equally extreme view that the whole value of the present lies in the hope that it is preparing one for pleasure in the future. Thus, unlimited Cyrenaicism may safely be administered, until the symptoms cease, to the tired business man who is always waiting to enjoy life after he retires; or to the Puritan who grimly, and with a great air of virtue, eschews all pleasure here below, the better to taste heavenly bliss; or even to the over-practical boy who regards his youth as a mere preparation for his "real life," and cannot imagine himself pursuing any subject at school or college except in so far as it seems to him a means to a distant success in years that, after all, may never come. In a word, the good is not something that is reached only at the end of a career, but rather something that is being continuously realized throughout a whole life-time. The only end of a life that does not attain its end from day to day is death.

So much for the credit side of the sheet. We turn now to the items to be charged against Cyrenaicism. The most formidable of these to the popular eye is the alleged immorality of the teaching. This objection, however, is not intelligent and will not bear scrutiny. It does not take much pondering to discover the lack of weight in the argument that a thing cannot be true because, if it were, it would shock some moral interest or sensibility. The constitution of the universe, whatever it may be, displays little regard for human susceptibilities and prejudices, and plenty of truths exist that woefully confuse our conduct and thwart a morally ideal life.

But in the case of a theory of ethics the argument is nothing short of light-minded. For it is difficult to see how any truth about morals can be subversive to morality, or how any sound conclusions as to what is bad can be reached before we know what the good really is. And it is only in the light of such knowledge that we can decide who is right and who is wrong. Hence an ethical theory cannot be condemned beforehand on the score that it is prejudicial to good conduct, or be brought to trial on any count save that of its possible falsity. There is, then, no sense or use in denouncing a moral system as immoral until we have investigated its claim to be true; and if we find reasonable grounds for disallowing this claim, further vituperation of its demerits is superfluous. On the other hand, if the available evidence supports it, and validates, say, the hypothesis that the good is pleasure, then it is not the adherents, but the enemies of the theory, who are attacking morality and corrupting society by subversive teaching.

Now if we challenge Cyrenaicism on the only ground that it can be challenged, that is, on the ground of its truth, and examine its case without prejudice and hysteria, we shall find some reason for believing that the spring and end of moral activity may, after all, not be the pleasure of the moment or even the greatest amount of pleasure in the long run. The mystic, for instance, may be right, and all pleasures may be the bonds of corruption by which an immortal soul is buried in the flesh, as in a prison or a tomb, and kept from the true felicity of reunion with the divine. Or perhaps the reasoning of the Puritan is correct, and the world in all its beauty and the body with its subtle delights were created expressly that the soul, by resisting their allurements and putting them behind her, might discipline herself to glorify God only, and make herself worthy of enjoying him forever. But we do not need to appeal to such arguments, which, after all, are cogent only if the highly disputable theological and metaphysical systems upon which they are based be true. In the next chapter we shall find Plato bringing forward less far-fetched reasons why pleasure should not be the good; and, when we come to Aristotle, we shall have to deal with a careful and scientifically

worked-out system of ethics, based upon a minute observation of human nature, in which the claim of pleasure to be the motive and end of the moral life is vigorously combatted. In spite, then, of its appeal to common sense and of the well weighed and marshalled evidence that the Epicureans and the various modern systems of Hedonism and Utilitarianism have brought forward in its support, we shall do well not to assent to the pleasure theory until we have had a chance to review it in the light of the Platonic and Aristotelian objections.

There remains a final difficulty to be written down against Cyrenaicism. The individualism that Aristippus, like Antisthenes, inherited from the Sophists led him and all his followers except Anniceris into an error which we have already discussed at length in connection with the Cynics. They felt that man was essentially a self-sufficient rather than a social animal, and therefore considered the particular man to be the primary and basic unit in human life and gave a derivative and subordinate place to our social inclinations, affections, activities, and institutions. They did not, to be sure, go to the Cynic extreme of rejecting the whole structure of society as an artificial and unnecessary hindrance to a virtuous life; but they only valued it in so far as it subserved the interests and ministered to the pleasures of the individual. Hence we find in Cyrenaicism, though to a less marked degree, the same exaggerated cosmopolitanism, the same superiority to law, institution, and public opinion, the same disparagement of patriotism, devotion to the state, family affection, and social ties as characterized the Cynics. Anniceris alone, as we remarked, saw the primary nature of man's gregarious instinct and of the pleasures that spring from it, and thereby made a most important and far-reaching contribution to the perspective of Hedonism.

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We will now cast a last glance back over the field that we have just been traversing. Socrates, we saw, for all his great work in setting up ethics as a major subject of philosophy, left no clear indication as to what he meant by the good. To answer

this question became the all-absorbing interest of several of his disciples.

Euclid of Megara, who had been in his earlier days a follower of Parmenidean doctrine, offered as his solution an amalgamation of Socratic and Eleatic doctrine. By the good, he thought, Socrates had meant something that might be identified with the Eleatic One. The two things, in his eyes, seemed made and meant for each other. Parmenides had reduced the One to an almost abstract form with no tangible properties save perhaps solidity and sphericity. Socrates had discovered a simple principle for the several virtues, and had perhaps reduced all forms that mattered in his opinion to one—the Form of the Good—endowed with the simplicity, the universality, and the unchangeableness of Eleatic Being. Only endow the One in its turn with goodness and forget about its roundness and solidity, and the match was made. Reflection, however, showed us that a One or a Good as undefined as Parmenides and Socrates had left them had little valuable to bestow upon each other, and that their union was not a fruitful one for ethics. The question "What is the good?" left unanswered by Socrates, remained, to all practical intents and purposes, unanswered at Euclid's hands.

We also found among the Megarics a keen interest in logic, which showed itself partly in the invention of puzzles and catches, and partly in a reproduction of the Eleatic paradoxes directed against the existence of the Many.

Unlike Euclid, the founders of the Cynic and Cyrenaic Schools were not originally metaphysicians, but on the contrary were bred in a profound distrust of the "useless" investigations and results of speculation and physical science. Antisthenes started his philosophic career as a Sophist, and Aristippus was educated under Protagorean influences. Their later association with Socrates intensified, if anything, their practical point of view, and led them to confine their inquiry into the nature of the good entirely to the field of ethics.

Antisthenes took it from Socrates that virtue is one and the same for all, that it consists in knowledge of what is best for a man, and that no man who knows what is best for him

will voluntarily act against his interests or, in other words, do evil. By the Sophists he had already been convinced that each individual was the only measure of his own interests and good. Putting two and two together, he concluded that every man was capable of being wholly virtuous and happy in and by himself. Only leave a man to himself and to the dictates of his own reason, and he would spontaneously do the right thing. Evil and unhappiness were due entirely to the influence upon the mind of outer circumstances, among which were to be reckoned the passions, and particularly the seduction of pleasure and the fear of pain. Moral training, then, consisted in steeling the character to self-sufficiency. Once this was secured, with its consequent independence on external circumstances and indifference to pleasure and pain, happiness was a matter of course. In a word, virtue was its own reward, and was to be cultivated for its own sake.

The Cynics were confirmed in this interpretation of Socrates' teaching by the example of his life. They seized upon his frugality, his cheerful poverty, his independence, his unconventionality, his courage and even-mindedness, as the qualities *par excellence* of a good life, and sought to fashion their own behavior after these characteristics.

In application the Cynics' doctrine would have been, we found, exceedingly radical and anarchistic. Human society, as they saw it, was a wholly unnecessary and artificial growth which had made men interdependent on one another, not independent, and encouraged their leaning on supports that might give way at a moment's notice and at a turn of the wheel of fortune. If, then, self-sufficiency, virtue, and happiness—and these three were one—were to be restored to fallen humanity, there was nothing for it but to raze society to the ground. There must be an end to the ties, institutions, forms, and amenities, such as family, state, church, property, wealth, and all the rest, that had destroyed the normal simplicity of human life and smothered the direct and natural satisfaction of a few primitive and unescapable wants beneath a parasitic mass of complications and refinements. An entirely fresh start had to be made, in which co-operation, interdependence,

and dalliance with material adjuncts were reduced to the minimum compatible with the barest requirements of food, shelter, and the reproduction of the species. The Cynics tried to show by their own doctrine what this perfectly simple and virtuous life, unperverted by civilization, would be like. And the picturesque figures of Antisthenes, Diogenes, and Crates, with their rags, their tubs, their beggar's bowls, their calm ignoring of all convention and authority, and their performance upon the house-top of everything that is usually relegated to the chamber or the closet, are probably sufficiently vivid in our memories to need no re-sketching.

The Cyrenaics, we saw, took quite a different view of Socrates' meaning and of life in general. Aristippus, the leader of the School, by nature a genial, pleasure-loving man of the world, was born in the easiest of circumstances in a city famous in antiquity for its luxurious atmosphere. Turned disciple of Socrates, he was perhaps attracted by his master's tolerance, mellowness, sociability, gaiety, and power of enjoyment, which doubtless seemed to him the fruits of a teaching that, so far as it in any way indicated the good of which virtue is the knowledge, seemed to imply that this good was to be found in pleasure.

However that may be, Aristippus was convinced that such was Socrates' meaning. His early training, moreover, in Protagorean doctrine led him to pivot the moral life upon the individual and to feel that each man was the sole judge of what was pleasantest and therefore best for him. He sought also, in pursuance of this logic, to make the moral life of the individual revolve about the present moment, and to make each separate instant sufficient unto itself. The good, he said, lay in the pleasure of the moment. But as it was manifestly impossible to ignore the possible painful consequences of a pleasure in estimating its worth at the moment, the Cyrenaics were forced to modify their doctrine and admit something besides intrinsic value into the computation of total goodness. Since the most important consequences were due generally to the recoil of society, pleasure was best obtained by adapting oneself to society and the world as one found them. Hence, although

in theory pleasures were equally good irrespective of their sources, and the individual was superior to law and public opinion, even to the extent of being justified in committing a so-called "crime" if it gave him enjoyment and he could escape painful consequences, still, the wise man would make it a rule to conform to the law and usages of his world and avoid punishable or censurable acts.

The Cyrenaics, then, did not demand the abolition of society as it stood or advocate any return to a state of nature. Nor was their behavior, although somewhat lax and quite frank and free from hypocrisy, in any way original and startling. But if they tolerated and even approved the social system into which they were born, it was only because they saw in it a means that each individual might use with profit to the furtherance of his own ends and the securing of his private pleasure. The majority of them, like the Cynics, professed themselves "citizens of the world" above such ties as family affection, patriotism, and friendship, except in so far as these things might prove advantageous. Anniceris, alone, saw that the social, self-sacrificing instincts were as innate and primary as the selfish ones, and thus forestalled such modern forms of Hedonism as the Utilitarian ethics.

The Cyrenaics also made an important contribution to psychology when they did away with the distinction between physical and mental pleasures and pointed out that all enjoyment, whatever its source, was a feeling, and therefore an activity of the body.

In their logic and theory of knowledge both the Cynics and the Cyrenaics drew largely from the Sophists. They were ardent opponents of the Platonic theory that Reality is composed of the abstract Forms and common natures, expressed in class-concepts and common names, in the knowledge of which our search for truth comes to rest. Not only, they declared, had these Forms no standing in metaphysics, but they gave us no knowledge of anything. They were mere empty names, according to the Cynics, based upon chance and surface resemblances, and did not in any way reveal the private and individual nature that makes each particular thing itself and

nothing else. The Cyrenaics went still further. Holding that the objects of knowledge were not outer things, but sensations, and convinced that the individual could know no sensations save his own, they maintained that, since different individuals were not in a position to compare their experiences, it was impossible to know whether or no their streams of sensation were similar. Common names and class-concepts, then, far from indicating the real natures of objects, did not even stand for any resemblance, however superficial, between your sensations and mine that could be verified. They were as baseless and misleading in logic and the theory of knowledge as they were worthless for propping up futile speculation about the nature of the world. This attitude towards class-concepts and common natures, or "universals" as they are also called, made the Cynics and the Cyrenaics the progenitors of the famous "nominalistic" theory. And their disagreement with Plato was the beginning of an endless controversy over the existence and standing of class-concepts and Forms, which raged with special violence in the disputes of the Schoolmen in the Middle Ages, and still agitates philosophy to-day.

But now let us turn to Plato, and to his famous theory of Ideas or Forms, which has been under such bitter attack.

## CHAPTER IV

## PLATO'S LIFE AND TIMES

### I

The eighty years of Plato's life span one of the most Heracleitean and unstable epochs of Greek history. Born at Athens in 427 B. C., two years after the death of Pericles, he saw with the eyes of childhood and youth the last phases of the Peloponnesian War and the destruction of the Athenian Empire. He was fourteen at the time of the Sicilian Expedition and the disaster at Syracuse, which spelled the beginning of the end with their immediate consequences of rebellion among the subject-allies of the Delian League, Persian intervention on the side of Sparta, and an anti-democratic revolution and brief régime of oligarchy in the capital itself. And he had but just come of age when the Spartan fleet gave the *coup de grace* at Aegispotami, and Athens was in the death-struggle of the second overthrow of the democracy and the interregnum of the Thirty Tyrants, which preceded her final surrender to Lacedaemon.

The period of Spartan supremacy that followed lasted a generation, but it brought not peace but a sword. The Ionian cities, which Sparta had allowed Persia to seize in return for help against Athens, took part in the unsuccessful revolt of Cyrus against his brother, the Great King, and recovered for the moment their freedom. After Cyrus' death they were again threatened with subjection, and turned for help to Sparta, their former betrayer. The latter, finding conditions changed and tempted by the possible spoils, came to their aid and threw an army, including the remnant of Xenophon's famous Ten Thousand, into Asia Minor. The Aegean world was ablaze again. For six years, as long as Sparta controlled the sea, the Persians were consistently worsted. But in the meantime they were collecting a fleet, under the command of

the Athenian admiral Conon, and, what is more, were making trouble very successfully for their enemy at home. Sparta was not a popular victor and overlord, and it scarcely needed the bribes and promises of a Persian agent to combine against her Thebes and Athens, seconded by her former allies in the Peloponnesian War who had made heavy sacrifices in her behalf and received nothing in return. The result was that she found not only a Persian, but a new Greek, war on her hands. Events on both sides of the Aegean culminated in 394 B. C. The Persian fleet defeated the Spartans at Cnidus and by its mastery of the sea made their position in Asia so untenable that they were forced to retire altogether. And in Greece, although they were technically the winners of the battle of Coronea, they received so severe a check at the hands of the Thebans that they had to evacuate Boeotia and fall back to the Peloponnesus, where the allied forces managed for a while to hold them prisoners. At this time Plato was thirty-three years old.

Athens made the best of the temporary check to Spartan pretensions. She rebuilt between the city and the Peiraeus the Long Walls, which she had had to raze at the end of the Peloponnesian War. Moreover, she reconstituted her navy, and re-established her supremacy on the shores of the Hellespont and the Propontis. Owing to the pressure, however, of the Great King backed by Sparta, the Greek cities of Ionia and the islands of Clazomenae and Cyprus had to be abandoned once and for all to Persia. Renewed activity on the part of the Spartans and a new invasion of Boeotia, which brought them to Plataea and the very gates of Attica, threw Athens once more into the arms of Thebes, and an unauthorized but unpunished raid by a Spartan commander into Athenian territory precipitated new hostilities. Athens formed a new League, directed this time, not against Persia, but against Sparta, and gradually the Lacedaemonians were driven back by land. On the sea, too, they were signally defeated at the battle of Naxos, and were set back badly in an attack that they made on the island of Corcyra. These checks inclined them to a peace, which Athens, whose enmity towards

Sparta was already more than counterbalanced by her jealousy of the growing power of her ally Thebes, was only too ready to accept. (371 B. C.)

The remaining twenty-five years of Plato's life were passed for the most part under happier auspices so far as his country was concerned. To be sure, war broke out again immediately, provoked by a Spartan invasion of Boeotia in direct contravention of the peace terms. But out of the scraps of the treaty Sparta pieced together, as it were, her own death warrant. The Thebans, under Epaminondas, defeated her at Leuctra, to the surprise of everybody including themselves, and not only drove her back across the Isthmus, but invaded the Peloponnesus, where the subject cities of Arcadia had already revolted against her. And a second invasion ended with the total destruction of her power and the break-up of her empire at the battle of Mantinea in 362. Athens had at first remained neutral, but her fear of Theban supremacy had prevailed and she had joined forces with Sparta to redress the balance of power. She had backed the wrong horse, it is true, but things turned out to her advantage in the end. She did not become deeply involved in the war and had an opportunity, while her friends and foes were busy, to extend and consolidate her new empire. And when, after Mantinea the Thebans, who had lost their great general, Epaminondas, failed in the hour of victory to exploit their position politically and pursue a policy of aggression, she found herself, now that Sparta was prostrate, the great power of Greece once more, free to add to her territory the Thracian Chersonese and to recover Euboea, with none to say her nay.

Still, Plato's star was not destined to set in a cloudless sky. It had risen among storm-clouds, and when it sank, they were piling high and ominous again to the north and east. He had seen the fall of the first Athenian Empire, and he was to see the beginning of the dissolution of the second. Before his death the islands of the eastern Aegean, including Rhodes, had been lost to the growing power of Halicarnassus in Asia Minor. In the north a new power, Macedon, was taking under Philip its first steps towards an eventual domination of the world.

The so-called Sacred War between Phocis and Thebes, in the course of which the Phoceans occupied Delphi, seized the temple treasure, and spent part of it bribing the tyrants of Pherae to attack the Thessalian allies of Thebes, had caused the Thessalians to appeal to Macedon for help. Thus Philip was given a pretext for intervention in Greek affairs, and for bringing a Macedonian army to the pass of Thermopylae. Athens was already being threatened in her Thracian possessions, and her great patriot and orator Demosthenes had sounded the alarm in his first Philippic. In 348 she lost the island of Euboea in a revolt instigated by Macedonian intrigue. The next year, when Plato died, Alexander the Great was already nine years old.

II

Plato's education may be said to have begun some six hundred years before his birth. He was, to be sure, reported and apparently believed by his nephew Speusippus to have been the son of Apollo—an honor shared, it will be remembered, by Pythagoras. More credible evidence, however, defers his divine origin to the mythical past, and through an earthly father, Ariston, enrolls him in one of the oldest and best born of the Athenian families, which claimed descent from Codrus, the last king of Athens, and sprang originally, so the tradition ran, from the God Poseidon himself. The family of his mother, Perictione, was even more distinguished. It, too, looked to the great Earth Shaker and Lord of the Sea as its first parent and counted among its kin, Solon, the law-giver and author of the first Athenian constitution, who, "in common with Anacreon . . . and many other poets," had commemorated in his verses the fame of his stock "for beauty, virtue, and all other high fortune." More contemporary members were Critias, a moving spirit of the oligarchic revolution and chief among the Thirty Tyrants, a cousin of Perictione; Charmides, her brother, famed for his grace and beauty, and also prominent later in the councils of the oligarchic party; and Pyrilampes, her uncle and second husband, no less handsome, "who never met his equal in Persia at the court of the Great King or in the whole

continent in all the places to which he went as Ambassador for stature and beauty." Besides Plato, Perictione had by her first husband Adeimantus and Glaucon, who are introduced by their brother as characters in the *Republic* and again in a later dialogue the *Parmenides*.

Of the number and the glory of the generations that had given him birth Plato was proud, and this pride as well as the fact of race helped not a little to color, or perhaps we shall say, to clarify his outlook on life. It was born and bred in him to discriminate between the noble and the vulgar, the beautiful and the ugly, the better and the worse, and to divide his world into two camps between which there could be no compromise. This heritage, allied as it was to a temperament prone to moral enthusiasm and mystical vision, might in other circumstances have produced quite different results. Had the camp to which he belonged been on top, had the world been more to his liking or he more shielded from it, he would perhaps have been spared that cynicism about appearances which is the beginning of philosophic wisdom, and have remained a mere statesman or a mere poet, too much in love with helping manage things as they were to perceive their local and temporary nature, or else too enamored of mooning at will among things as they were not to see that after all they revolved about and gravitated towards an earth. Or at least, since it is hard to imagine Plato without a philosophy, his system in happier and less favorable circumstances might have been, like Hegel's for example, a provincial glorification of the world in general and of his own place in it in particular.

Far, however, from being to his taste and giving free scope for the exercise of either his practical or his artistic capacities, the world into which he was born was one from which he instinctively recoiled, and yet from which he could not retire to dream of a better. His most impressionable years were spent, as we have already remarked, among the last scenes of the Peloponnesian War, so fraught with disaster and humiliation abroad and shame at home. An idealist and a dreamer in love with the beautiful and the good, a patriot and an aristocrat whose fathers had told him of the noble works done by

Pericles in their day and by his own ancestors in the old time before them, he was fated to watch the swift ruin of his relatives, his friends, his class, his country. The Empire was a scattered wreckage of a thousand islands and cities washed up by the sea. A Spartan garrison was on its way to encamp in the Acropolis. Nay more, Athens had lost not only the whole world but, it might seem, her soul as well. Under Pericles she had appeared for a moment as a truly imperial and aristocratic democracy—a whole people, almost, of noblemen, docile to the guidance of its wisest and its best. But it needed a gentleman and a genius like Pericles to sustain her even for a moment at that level. Already during his life the disintegrating forces that we noted in the chapter on the Sophists were at work. And after his death the demoralization was rapid and complete. The democracy that had almost justified itself as a form of government by following his leadership now flung itself with characteristic fickleness into the arms of the leader of the opposition, the practical, but unenlightened and unscrupulous demagogue, Cleon, only to turn from him to the chaster but less virile embrace of the honest but incompetent Nicias, and again to the more vicious seductions of the brilliant, reckless, and wholly untrustworthy Alcibiades. And the same hands as had helped build the Parthenon and had applauded the transfiguration of the blind vengeance of the outworn Furies into the humane justice of the "Eumenides," now nonchalantly committed the atrocity at Melos, or condemned and executed wholesale the generals after Arginusae in the name of piety and patriotism and in defiance of every consideration of law and right, or put Socrates to death because he made a nuisance of himself criticizing and opposing these democratic ways.

It could have given Plato little comfort, however, to turn from the degradation of popular government to the behavior of his own set. The everlasting struggle between the rich and the poor at Athens had been intensified rather than suspended by the war with Sparta. The rich had more than ever to fight for their lives, and in the circumstances no very great nicety of conduct was to be expected. Still, their scutcheon was

blotted with perhaps an unnecessary amount of unscrupulousness and endeavor to make private capital of public interests. Nor were they any cleaner fighters as the upper than as the under dog. The episode of the Four Hundred engineered by Alcibiades, and the reign of terror of the Thirty Tyrants which had cast such dishonor on his uncle Charmides and his cousin Critias, were enough to disillusion Plato on that score.

The perspective, then, in which events must inevitably have been viewed by one born with such an eye and to such times was calculated to keep Plato at a distance from his world. He could not, to be sure, regard things dispassionately, but his passion of revolt bred a detached and critical attitude, which in a smaller mind might have got no further than carping and lamentation, but which in his case stimulated meditation and put him on the road towards philosophy. Furthermore, it was a perspective that justified his native tendency to discriminate between the sheep and the goats in the flock of events and to divide his world into two folds. With him there could be no easy, thoughtless optimism, no facile confusion of the merely practicable and expedient with the ideal, no hocus-pocus of transforming somehow the shortcomings of the universe into the very substance of its perfection. He could not sing "all's right with the world" with the exuberant but injudicious Pippa, or, in despair of bettering things otherwise than by submitting to them, exclaim like the Stoics that all things were according to nature and that whatever was according to nature was good. Instinct and experience had made of him too convinced a dualist for that. Over against the world as he wished it stood the stubborn, brutal fact of things as they were. He began perhaps by contrasting the Athens of his day with the Athens of his father's time, or with the simplicity, discipline, and competence of Spartan life, and then with the vision of the perfect city that was beginning to take shape in his mind. And later, when the scope of his meditation was enlarged to include all time and existence, it was natural for him to cleave the universe in two and oppose to the corruption and inconstancy of the stream of dissolving phenomena an order that was not only better, but also truer and more real, than

the flux. For such a dualism there was, moreover, ample precedent in the philosophies with which he was becoming familiar.

Plato's immediate family escaped by good fortune the financial ruin that the War was bringing upon so many of his set, and notably upon his uncle Charmides, and it was therefore in a position to give him every advantage of education that money could bestow. There were the conventional seven years of nursery life at home, with games and play, and the old nurse who told him tales of the Gods and heroes, and frightened him with stories of hobgoblins that would eat up little boys unless they were good. And then came the tutor to admonish him as to the dress, table manners, and general deportment of a little gentleman, to punish him if need be, and to take him to the best private school in town and fetch him home at night. There he must wrestle awhile with reading and writing and perhaps a little arithmetic, though he had probably learned at home to reckon with his fingers or even with pebbles and a reckoning board. Once he had mastered his letters, there were interminable passages from the Iliad and Odyssey, selections from Hesiod, and suitable precepts from the Gnomic, and songs from the Lyric poets, all to be learned by heart. And there were lessons in singing and accompanying himself upon the lyre, or perhaps, if he had a special aptitude for music, upon the cither. Later, every afternoon saw instruction in wrestling and running and jumping and throwing the quoit and the spear. As the boy grew older and stronger, more and more attention was given to athletics, till, at the age of eighteen, he must have left home and school in common with his comrades for the two years of military and almost exclusively physical training in camp and garrison and field, required by the state of the sons of all Athenian citizens.[1] It is not improbable that he was assigned to the cavalry as his branch [2] and took his place in the splendid troop already im-

1 The supplementation and eventual replacement of military training by instruction in literature, rhetoric, and philosophy does not seem to have begun before the third century B. C.

2 *Cf.* Gomperz, *op. cit.,* Bk. V, ch. I, 1.

mortalized by Pheidias in the frieze of the Parthenon. And considering that Athens was now making her last desperate stand against Sparta, it is not improbable that Plato saw active service. His brothers, he tells us, distinguished themselves at Megara.[3] Ancient tradition, indeed, drawing, it would seem, largely upon the imagination, credited him with taking part in three campaigns and awarded him the prize for valor at Delium, where his stepfather, Pyrilampes, also fought and was wounded.

His prowess in other lines was celebrated by antiquity in a similarly fulsome and untrustworthy way. We hear of his fame as an athlete, and how he entered the wrestling contests and carried off the victory at the Pythian, Isthmian, and Olympic Games. In fact, the name "Plato" was a nickname meaning broad. Painting, we are told, he studied with the best Athenian artists of his day, and his music master was a pupil of the celebrated musician Damon, the bosom friend of Pericles. How much truth there is in these reports it is impossible to determine, but they bear witness at least to the outstanding and universal quality of Plato's genius, of which there can be no doubt. Nor, on this point have we any reason to challenge the statement of his nephew that he was from the beginning a hard-working and exceptionally brilliant student who showed early all the promise that he later more than fulfilled.

In any case this genius found at hand far more to feed on than was provided by the old-fashioned curriculum. The new education advocated and provided by the Sophists, with their lectures on grammar, rhetoric, mathematics, the physical sciences, and philosophy, was already supplementing and taking the place of the classical system. And Plato could not escape or disdain the new knowledge that they were diffusing. Indeed, his first lessons in philosophy were had, not from Socrates, but from a Heracleitean named Cratylus, who had developed the Protagorean and skeptical possibilities of his master's doctrine to a very high and rather thin pitch. He refused to speak, it is said—words, we may suppose, being

[3] Whether the engagement of 424 B. C. or 409 B. C. is referred to is an open question. *Cf.* Zeller, *Plato,* p. 6, note 6; Burnet, *op. cit.,* p. 207.

too evanescent, subjective, and relative to the speaker to convey knowledge[4]—but would only move his finger; and this apparently merely to intimate that it was not only impossible to step into the same river twice as Heracleitus had declared, but even to do so once, because the man in the water would not be identical with himself on the bank, so swift and intangible was the flux.

This first teaching left a profound, though at the time subconscious, impression on Plato's mind, and later, when he came to work out his own system, he found in the flux the natural undercurrent of the impermanence, the incompleteness, the incurable falling short and slipping back, of the world of particular and concrete things. In the Heracleitean Logos also—in the unchanging law and order of change manifested in even the wildest vagaries of the turbulent stream of existence—he may have got his first hint that beyond the rush and turmoil of the things of sense there might really be the calm, the peace, the handhold on eternity, of which he dreamed.

That odd friend of his uncle Charmides, the eccentric and conspicuous Socrates, must also have been a familiar enough figure of his childhood and youth. We are told, to be sure, that the two did not meet till Plato was twenty, but the credibility of this statement has been challenged.[5] Still, however long-standing his acquaintance with Socrates may have been, and however profound the admiration and warm the friendship into which it ripened, Plato was by no means immediately converted, like Antisthenes and Aristippus, to the profession of philosophy as a life work, and it is an open question whether he was ever a member of the more intimate circle of Socrates' disciples.[6] His interest in the subject to be sure must have been deepening all the while and working beneath the surface. And he was steadily becoming more and more attached to Socrates' person and influenced by his teaching; so much so, indeed, that when his philosophic genius eventually did flower on Socrates' grave, he of all the disciples was the best fitted, not only by his talents but by his sympathy and understanding,

[4] Burnet, *op. cit.*, p. 209.
[5] Burnet, *op. cit., loc. cit.*
[6] Burnet, *op. cit., loc. cit.*

to record and express the greatness and beauty of his master's character and teaching. But for the moment Plato's ambitions lay elsewhere, more drawn to artistic pursuits and by the fascination of public affairs.

As for Socrates, probably he, too, had no inkling of the career that awaited his pupil. In the night before Plato came to him he may perhaps have dreamed, as the ancient tradition had it, that a swan, the bird of Apollo, came flying towards him with sweet song. But apparently he entertained an angel unawares, seeing in Plato, so far as he saw anything, only a young man whose position and capacities entitled him to a brilliant public career if he chose to avail himself of his opportunities. And certainly he never suspected that this broad-browed, well-set-up, rather shy but appreciative youth, the nephew of his friend Charmides, with his great family and his high political connections with both parties, his fine mind and artistic temperament, his keen interest in poetry and music and politics as well as in philosophy, was destined to be one of the greatest philosophers of all time, in whose undying fame he himself was to find the best part of his own immortality.

For, as we have said, Plato was bent at the moment on other things. Like many another young man about town, he was, for example, trying his hand at verses, the writing of which among the Athenians as among the Japanese was a mark and a diversion of the fashionable world. The ancient tradition probably credits him with far more than he ever wrote and with literary aspirations that he cherished only remotely, if at all. In addition to songs and dithyrambs, or lyric outbursts of a type of which Dryden's "Alexander's Feast" is perhaps the best illustration in English, we are told that he not only wrote a dramatic work in the conventional form of three connected tragedies and a burlesque or "satyr-play," but also composed an epic—which he tore up when it was finished because it proved so inferior to the Iliad and Odyssey. He intended furthermore, so the story runs, to take part in the official competitions held each year for the best tragedy to be presented at a festival of Dionysus, and his drama had already been passed by the authorities for performance, granted a chorus, and turned

over to the actors for rehearsal, when his interest suddenly veered to philosophy, and he withdrew the drama from the lists and burned it along with the rest of his verse. However that may be, and most of it is doubtful, the Greek Anthology has preserved fragments of love-poems purporting to be his, of which some at least may be genuine. They are not of signal merit, but two epigrams of reputation and beauty may be quoted in passing. To a friend named Aster, or Star, he writes:

"Sweet Child, thou star of love and beauty bright,
Alone thou lookest on the midnight skies;
Oh! that my spirit were yon Heaven of light
To gaze upon thee with a thousand eyes."

and again on the death of the same friend:

"Thou wert the morning star among the living,
Ere thy fair light had fled;
Now, having died, thou art as Hesperus, giving
New splendour to the dead." [7]

More than his art, however, the impulse to take up politics as a career and devote himself to the public service was to the fore in Plato's mind. There were the traditions of his family which for twenty generations, in story at least, had labored to make Athens more glorious. There was the example of his stepfather, who had been a supporter and personal friend of Pericles at the moment when democracy seemed about to succeed. On his mother's side he had a "pull" with the oligarchic party through his uncle and cousin. And finally Socrates himself was urging him to take the step.[8] Twice, indeed, the die was nearly cast. After the revolution and the establishment of the Thirty, Charmides and Critias urged him to enter politics and join their ranks. And he might perhaps have done so, had his disgust and indignation not been aroused by an attempt of the new authorities to force Socrates to act as an agent of theirs in the illegal arrest of one Leon of Salamis whom they wished to put to death. Again, after the fall of the oligarchy, the temptation recurred. The restored democracy, led by

[7] Trans. Shelley.

[8] Burnet, *op. cit.*, p. 210.

Thrasybulus, showed at first considerable common sense and generosity. A general political amnesty was declared, the question of compensation for the property confiscated by the oligarchs was waived or compromised, and the debt incurred by them was assumed by the new government in an honest attempt at a thoroughgoing reconciliation of the hostile factions. Sweeping reforms were also introduced and, what is more, carried out. The statute law was amplified and revised. The list of Athenian subjects was purged of foreigners, and the strict requirements for citizenship originally drawn up by Solon were re-enacted. The old custom was revived of paying citizens for jury duty and attendance at the Assembly and even at the theatre. Incidentally, the Ionic alphabet with its special characters for long vowels and double consonants was officially adopted. And finally the navy was reorganized, and Athenian finances were placed on a sound basis. The democracy was apparently trying to make a fresh and better start, and for the moment Plato seems to have felt that here, at last, was a movement towards good government in which he could take part without sacrifice of principle or loss of self-respect. But his faith and hope were doomed to be short lived, and with them his charity. He had reckoned once more without his host. Though the new régime might agree to let bygones be bygones, its virtues did not include a tolerance of further free speech of an anti-democratic nature, particularly on the part of one exasperating old busybody, the friend of oligarchs, beloved of the shifty Alcibiades and the hated Critias, and still a great fascinator of Athenian youth; a veritable gadfly for persistence and annoyance, to whose buzzing and stinging nothing, it would seem, short of death, could put a stop. Within five years of its return to power the democratic government had managed to find edifying moral and religious reasons why its discomfort should be relieved, and had tried and executed Socrates.

The death of his master turned Plato definitely and irrevocably into a philosopher. He had been active in Socrates' behalf during the trial, and had been confident of an acquittal. He had wished, it is said, to undertake the defense him-

self, and had been among the friends who offered to pay the fine that they had finally prevailed upon the old man to propose as an alternative penalty. It may be, too, that the shock of the conviction helped bring on the illness that prevented his being at hand when the sentence was carried out.[9] In any case it seems to have provoked a moral crisis, not unlike the experience of religious conversion, which fixed once and for all Plato's nature and revealed to him his final mission. The outrage done his sense of right and wrong aroused his conscience and gave seriousness and even severity to his character. The flood of grief and anger by which he was swept drowned everything except the memory and example of Socrates. Poetry and art, if they had not been already largely subordinated to the growth of his other interests, now appeared trivial and unworthy. All hope of a political career was at an end, for it was unthinkable that he should enter public life in the service of a people that had just deliberately committed so wanton and unjustifiable a crime. Moreover, the explosion of anti-aristocratic feeling made Athens too uncomfortable, if not too dangerous, for him to remain there. The old world, which had been little enough to his liking, had come tumbling about his ears, and the ruins were not fit to live in. The only refuge left him, the only place where henceforth he could move freely and without repugnance, was the world of thought, of theory, of vision of the untarnished Forms that dwelt beyond the confusion and imperfection of the brute facts of sense and material accomplishment. And into this world the dead Socrates imperiously beckoned him. His business in life had become clear—to follow in Socrates' footsteps, to vindicate and exalt his memory, to think, to discourse, to teach the truth and seek the good as he had done. To the support of this new ideal which gave concentration and point to his genius Plato's other selves rose transfigured. The would-be statesman, cut off from a hand in public affairs and turned to reflection, meditated an ideal state in which philosophers should be kings, and founded a school of educational and political theory to which princes sent their sons to learn

[9] *Cf.* Zeller, *Plato,* p. 22.

how to rule. The poet and artist, haunted by a moral influence and vision, devoted all his craftsmanship to portraying in the Dialogues "the wisest and the justest and the best of men," and made himself the playwright of a great philosophic system, modelling it in dramatic form with matchless skill and grace, and dedicating it no less to beauty than to truth.

This is not to say that Plato turned white over night. The foundations of his conversion had long since been laid in years of association with Socrates, and its effects were equally slow working. Some years probably were to pass, and other influences and experiences were to be brought to bear, before the great picture of his master took on shape; and a still longer time, perhaps, before he began to set forth a doctrine of his own. Indeed it is part of the argument that the earlier Platonic dialogues, even including the *Republic* and the *Phaedo*, reproduce Socrates' own views, to suppose that Plato began his career as a historian of philosophy and a recorder of other people's opinions rather than as an independent thinker.[10] To this point we shall have occasion to return again.

After the death of Socrates Plato found it advisable to leave town for a while till things should blow over. His first move was short—to Megara only a few miles away. There he visited his fellow-pupil Euclid, who seems to have kept open house for a number of refugees from the Socratic circle and to have been the rallying point of a brilliant and sympathetic gathering. Plato was much impressed with Euclid's view, with which we familiarized ourselves in the last chapter, that the Socratic Good is identical with the Eleatic One and is therefore the only thing that has real being. Its influence was long enduring, and the difficulties that little by little he began to find in it proved important factors in stimulating him to critical and independent thought.[11]

How Plato spent the next ten years is something of a mystery. The length of his stop at Megara is unknown. Ancient tradition fills in the rest of the period with extensive sojournings in Egypt and Cyrene, which, though probably exagger-

[10] *Cf.* Burnet, *op. cit.*, pp. 211–212, § 162.
[11] *Cf.* Burnet, *op. cit.*, pp. 230–231, §§ 176–177.

ated, may have some foundation in fact. He must also have devoted a part of his time to literary work, for to this decade belong apparently the so-called "Socratic" dialogues, the *Apology, Euthryphro, Crito, Charmides, Laches, Protagoras, Meno, Euthydemus, Gorgias,* and *Lysis,* and possibly the *Symposium* and *Phaedo,* and a part of the *Republic.*[12] But whether Plato wrote as he ran, or settled at Athens again towards the end of the epoch, is uncertain.

We do find him, however, pretty definitely on a trip to Italy and Sicily some twelve years after Socrates' death. One of the things that had most affected him during his discipleship was the Orphic-Pythagorean teaching. With the belief in the divine origin and fall of the soul, her weary round of reincarnation, and her ultimate escape and reunion with the Godhead, he must always have been more or less familiar and impressed in its Orphic guise. But there were also such fascinating doctrines as those of Limit and the Unlimited, of Form and Matter, and of Reality as Number, to arrest his attention, as well as extensive investigations in mathematics—a subject that he, too, was keenly interested in and had studied, if not in Egypt and Cyrene, at any rate with Theodorus of

12 *Cf.* Burnet, *op. cit.,* pp. 211–212, § 162. The order in which the Platonic Dialogues were written has been greatly disputed and is still an open question. The old view regarded the critical dialogues like the *Theaetetus* and the *Parmenides* as earlier than the great constructive works like the *Phaedo, Phaedrus,* and *Republic.* This view, however, is now largely discredited. The modern theory, originally proposed by Campbell and Lutoslawski, and founded upon a comparison of the style of the other Dialogues with that of the *Laws,* Plato's latest work, places the constructive dialogues before the critical. Lutoslawski for example suggests the following order:—first a "Socratic" group mentioned above; then a first Platonic group composed of the *Cratylus, Symposium, Phaedo,* and the first book of the *Republic;* then a middle Platonic group comprising the rest of the *Republic,* the *Phaedrus,* and the *Theaetetus* and the *Parmenides;* and finally a later group—the *Sophist, Politicus, Philebus, Timaeus, Critias,* and *Laws.* This general order is in the main accepted, though the exact sequence is still a subject of considerable dispute. The problems of how much in the Dialogues is "Socratic" and how much Plato's own doctrine, and of whether and to what extent Plato changed his views as time went on, are of course intimately connected with the question of sequence. We may note that critics like Burnet would consider that everything through the *Phaedrus* is mainly "Socratic" rather than "Platonic" and that only the critical dialogues give us pure Plato.

Cyrene at Athens. A great part of this Pythagorean doctrine he may have had from Socrates' own lips, as we have seen;[13] but, if not, there had been fellow-disciples to share and discuss it with him, like Cebes and Simmias and Phaidondas from Thebes. Before joining Socrates they had been pupils of Philolaus, the most prominent Pythagorean of his day, who had fled from Italy to Greece at the time of the great uprising against the Brotherhood. From him they had learned that the earth was not stationary and the centre of the universe, but revolved about a central fire; that the differences between even the four elements were purely matters of geometrical form; and that the soul was a harmony of the bodily parts, although it had a double, or was somehow perhaps itself, only imprisoned temporarily in the body for its sins in a former existence. Philolaus had written a book, too, in which these views were set forth, and Plato, so a rather untrustworthy tradition states, had bought it at a high price and read and profited by it. In any case what his friends had told him was indelibly impressed upon his memory and haunted him with its charm. But there were few Pythagoreans left in Greece to talk to, now. The proscription in Italy was over long ago, and even before the death of Socrates Philolaus had gone back to die at Tarentum, his native town;[14] where, at the date of which we are speaking, the Order was once more firmly established and many of its prominent members were living. What, then, was more natural than that Plato, captivated by their mathematics and philosophy and eager to hear more at first hand, should decide to visit Italy? This at any rate is the motive that has been suggested for his first Italian journey.[15]

Whatever the reasons for the trip may have been, it is certain that he spent a large part of it in Pythagorean company. He became especially intimate with Archytas, who had been a pupil of Philolaus and was now not only the most celebrated representative of the Order but one of the most universal geniuses of his time. His merits as a philosopher were such

[13] *Cf. supra,* pp. 58, 74.

[14] The birthplace of Philolaus is also given as Crotona.

[15] Burnet, *op. cit.,* p. 211, § 161.

that Aristotle devoted a special treatise—unfortunately lost —to his system, and his contributions to arithmetic, geometry, mechanics, acoustics, and the theory of music were ranked very high. Also, if the story be true of his having devised a small flying-machine in the shape of a wooden pigeon balanced by an arrangement of weights and pulleys and launched by the escape of compressed air, he must be regarded as one of the fathers of aeronautics. Incidentally, he is said to have invented the rattle to amuse the children of his slaves. And he was an accomplished performer upon the flute. On the practical side, moreover, he showed not only ingenuity but great wisdom and force of character. He was the leading statesman of his city and a beloved and respected governor, and to his generalship as commander-in-chief of the army Tarentum owed her successful campaigns against even such powerful neighbors as Syracuse. Finally, all these qualities and talents were rooted in a fine and lovable nature full of charity and kindness. Plato and he quickly became fast friends. They talked mathematics and philosophy together, and Plato may perhaps have felt that at last he had met a man who lived up to his ideal of the perfect ruler in whom the king was a philosopher and the philosopher a king.

At this time, also, he made another friend who was destined to play an important part in his life. He was curious, it seems, to see the volcano Etna—or, as some say, probably maliciously, to try the Sicilian cooking, which was quite the French *cuisine* of the day—and the Pythagoreans, hospitably eager to make everything pleasant for their guest, either recommended or introduced him personally to a young man named Dion, a brother-in-law of the reigning tyrant of Syracuse, Dionysius I. Dion, out of kindness and curiosity, or, it may be, if he actually met Plato at Tarentum, out of friendship, asked his brother-in-law to invite the distinguished Athenian to come over from Tarentum for a visit. Dionysius may have been all the more willing to do so as he was developing an ambition to do the proper tyrannical thing and adorn his court with a literary and scientific circle. Indeed, he took to writing poetry himself in his old age, so bad, it is said, that it was hissed when it was read

at the Olympic Games. And, so goes the gossip, he even died a poetic death induced by too great indulgence of his joy, when finally the Athenians, moved, we may suspect, more by his political importance than his merits as a dramatist, awarded the prize at one of their official competitions to a tragedy of his entitled *The Ransom of Hector.*

However all this may be, Plato came to Syracuse as Dionysius' guest. But he found the court not at all to his liking. The affection of the youthful Dion, then about twenty years old, he fully returned; but his host he could not stomach. The tyrant was in almost all respects the opposite of the charming and learned Archytas, and for that matter exemplified everything that, in Plato's opinion, a ruler should not be. He was a self-made man whose real qualities could not conceal or offset the fact that he was a parvenu. He had started life in the humble and even despised capacity of a clerk in a magistrate's office, but his bravery as a soldier and his persuasive tongue brought him into public notice, and by a combination of luck, demagogy, unscrupulous cunning, and real ability he had curried favor with the masses and worked to the fore. He had attacked and ousted the existing military authorities for misconduct of the war against Carthage, and had had himself elected, along with others, a general. Then, having disposed of his fellow commanders, he had manoeuvred himself into the position of generalissimo with full powers, and it needed only the acquisition of a personal bodyguard, which he got by trickery, to make him a full-fledged tyrant. In fact, his rise must have seemed to Plato a perfect illustration of the final catastrophe in the decline of the State, about to be so tellingly described in the last books of the *Republic*—the transition from that next to the worst of all forms of government, democracy without aristocratic guidance, to the final degradation of tyranny. However, he was an able and clever, if unscrupulous and selfish, ruler, and under his sway Syracuse became easily not only the biggest and most important city in the Greek world, but the capital of an empire that comprised two-thirds or more of Sicily and all the toe of Italy, with dependencies along the shore of the instep, the heel, and the Adriatic

side of the ankle, and on the opposite Molossian shore; not to speak of allies in Calabria and Umbria, and at Ancona and the mouths of the Po.[16] But his ambition to drive the Carthaginians entirely out of Sicily and make himself master of the entire island was never fulfilled.

Dionysius' personality, as we have hinted, was not amiable. He was cruel, brutal, and suspicious, and he had never acquired even that superficial graciousness with which monarchs must cloak their boredom and even their displeasure. In the presence of the literary lights of his salon and among his distinguished guests he was naked and unashamed in his rudeness. On one occasion he spat in the face of the philosopher Aristippus, who put up with the insult because, as he explained, one had to get splashed sometimes in landing a big fish. And his domestic poet, Philoxenus, who told him the truth about his verses, was promptly packed off to the stone-quarries. Plato, too, one sometimes fancies, was not a particularly amiable character. In any case he was not a man to stand discourtesy even from a king. The stories that he raked Dionysius over the coals for his faults and spoke his mind on tyranny in general are probably not true. It is more likely that he postponed the expression of his feelings to the eighth and ninth books of the *Republic*, where the perfect tyrant is described at some length. But the two men undoubtedly got much on each other's nerves, and eventually had words. Dion's friendship was of no avail. Dionysius handed Plato over to the Spartan Ambassador—Sparta then being once more at war with Athens—with the request that the philosopher might be so disposed of as never again to worry the royal presence. The Ambassador, doubtless eager to please the court to which he was accredited, and none too sorry to have a chance of baiting the prominent alien enemy delivered into his hands, sent his charge off to Aegina, where it was death for an Athenian to set foot, and put him up for sale in the slave market. But he was recognized by a friend from Cyrene, bought by him, set free, and sent over to Athens,

[16] At least such was the extent of the Syracusan Empire in 379 B. C. a few years after Plato's first visit. *Cf.* Freeman, *History of Sicily* (ed. 1894), Vol. IV, pp. 211 ff. and map.

glad enough doubtless to reach home alive and quite sure that if there were one thing he would never do, it was to set foot in Syracuse again. The Gods, as we shall presently see, had other ideas.

Plato was now about forty. He was comfortably off and independent. At home things were going well enough. The Socrates affair was forgotten, or, if it was recalled, was remembered with a shame muted by time—like the Dreyfus affair in France to-day. The new war with Sparta had ended, to be sure, in an alliance between Lacedaemon and Persia, which was too strong to be resisted. But in the consequent "King's" Peace of Antalcidas, under whose terms all the Greek cities of Asia Minor and Cyprus were abandoned to Persian rule, Athens had not been treated as a vanquished power, but had been confirmed in her possession of the islands of Scyros, Lemnos, and Imbros, and left free to conclude such alliances as did not trespass upon the Great King's preserves. The foundation of her second empire was already laid, and in spite of the temporary check to her recuperation she was, after Sparta, the largest and most powerful state in Greece. It was, then, under favorable auspices that Plato did the conventional philosophic thing and settled down to teach.

He had, however, his own ideas not only as to his curriculum but with regard to the conditions under which teaching should be carried on. Antisthenes was already holding forth in the rooms of the school for bastards, but he ran only a day-school, and his pupils lived anywhere and anyhow with true Cynic independence and indifference. But Plato may have remembered Euclid's pleasant home in Megara, where the little band of refugees had foregathered, or the charm and intimacy of those bygone days when Socrates with his following used to drop in at the houses of his friends to talk and chaff. And in Italy, doubtless, he had been struck with the life and discipline of the Pythagorean monasteries.[17] So it was, perhaps, that he conceived the idea of something not unlike an English college, where his pupils should come not merely for instruction but to live together under a common rule. Some twenty minutes walk

[17] *Cf.* Burnet, *op. cit.*, p. 213, § 163.

outside the walls on the road to Eleusis, in the retirement of the suburbs, he had a house and garden. The property was a pleasant one, giving, as it did, on the whispering elms and plane trees and the olive groves of "Academe," a large park and playground laid out and bequeathed to the city by the statesman Cimon, but called after a local hero, or possibly an original owner of the land, named Hecademus. The running waters of the Cephisus babbled near by, and of a still evening "the feathered choir of nightingales" could be heard making their music in the laurel thickets of Colonus. Here, where he had not only his own garden but the shady and quiet walks of the park conveniently at hand for strolling and discoursing, he established himself and set about gathering in his scholars.

The school, known from its location as the "Academy," was at once successful and Plato proceeded to incorporate it—after the fashion of incorporation of the day—as a religious association dedicated to the Muses, the patronesses of philosophy. A college chapel was built and daily services were held in their honor, with solemn commemorative feasts once a month. There seems also to have been a "commons" where the students and sometimes the masters took their meals together. As the college grew, Plato engaged as assistants his nephew Speusippus and one Menedemus of Pyrrha, both without doubt "old boys." So large an establishment must have been something of a drain on Plato's means, and it is possible that as time went on his friends and pupils helped him maintain it. But apparently any one who so desired was always free to drop in and listen.[18]

The method of instruction naturally enough followed the Socratic convention, and was based on friendly association and informal talk punctuated with question and answer. This was supplemented by prepared but probably unwritten lectures, and by the setting of problems in subjects like mathematics, astronomy, and logic to be solved by the students. One of the lectures, on the Good, composed in Plato's old age, was particularly famous and much misunderstood, and was taken down and published by Aristotle and other pupils.[19] The series of Dia-

[18] *Cf.* Gomperz, *op. cit.*, Bk. V, ch. 1, § 6. Zeller, *op. cit.*, pp. 28–29.
[19] *Cf.* Zeller, *op. cit.*, p. 26; Burnet, *op. cit.*, pp. 221 ff., §§ 171–172.

logues, to which he was still adding, was perhaps a thing apart, written, now that he had become a professor, in moments of leisure from his teaching, and intended not so much for his students as for the public.[20]

The course of studies and the object at which it was directed were more novel. Like his master and his fellow disciples, Antisthenes and Aristippus, he had a theory of conduct and a way of conduct to preach, and centred his philosophy about the knowledge and practice of the good. But ethics did not absorb his attention, as it did theirs, to the exclusion, at any rate in the case of the Cynics and Cyrenaics, of all else. The lively curiosity about the nature of Reality, which perhaps even Socrates lacked and scorned, Plato shared to the full with the older thinkers. Nor was it dampened by any Sophistic skepticism regarding the right of the mind to assume that an objective world existed and the power of reason to discover how it was constructed. He had a theory of the character of true Being as positive, comprehensive, and all explaining as the theory, for example, of Democritus or Anaxagoras. It was, then, with an ethics founded upon a survey of the entire universe and braced by definite convictions as to the real nature of things, that he came prepared to tell men what the good was and how they should attain it. And conversely, ethics was so woven into the whole texture of his metaphysics that it glossed Reality with the sheen of moral perfection. There was no disengaging the one from the other and considering them separately.

But if the metaphysician in Plato gave a universal and cosmic background to the problem of conduct, the statesman and man of affairs in him proposed a highly concrete and localized solution. He felt that man was, to use the later phrase of Aristotle, a political animal, and that his moral energies could find their best if not their only expression, so far at least as the affairs of this world were concerned, in civic organization—or rather in civic organizations of the traditional, compact, manageable type of the Greek city-state. He had none of the anti-nationalism and cosmopolitanism, none of the superiority to political institutions, frontiers, ties,

[20] *Cf.* Burnet, *op. cit.*, p. 214, § 163.

and sentiments, that the Cynics and Cyrenaics thought should characterize the truly good and enlightened man. Aristippus' polite tolerance of government was far enough from his thought; the anarchy preached by Antisthenes was wholly opposed to it. Government was rather the very breath of moral life. Politics was ethics in action. And, though the moral principles applied in government were let down from heaven itself, their proper theatre was not the whole earth bared of all local divisions, barriers, and sentiments, but Athens or Sparta, or Syracuse, or some other particular state. The good man, the philosopher, was necessarily a patriotic man, attached to his city, absorbed in its activities, and fit to govern or be governed by it for the best.[21]

Metaphysics, then, dialectic, philosophy in the largest and most abstract sense of the word, had for Plato a very practical side and function. There could only be law and order and good behavior and happiness in a state if its rulers had a sound philosophy of life. And a sound philosophy of life could come only from a clear and just vision of the truth about all things. To raise his pupils, so far as they were capable of it, to this vision and to make them philosophers in order that they might, so to speak, be kings, was the aim of Plato's scheme. The need of such an education was patent enough to his eye. An intimate and bitter experience had given him his fill of the kind of person by which states ordinarily permitted themselves to be governed. His own Athens had provided samples in abundance of the unenlightened oligarch and democratic leader, and his visit to Syracuse had shown him what might be expected of a king who was not also a philosopher.

To attain, however, to the vision of the true nature of the universe did more than fit a man to play his part wisely and well in this world. Plato's innate mysticism and his immersion in Orphic-Pythagorean doctrine made him feel that philosophy was at the same time a holy thing and an instrument of spiritual redemption. Absorption in the spectacle that it unfolded, by detaching the soul from the body and fortifying her against the seduction of sense, actually helped unbind her

[21] *Cf.* Barker, *Greek Political Theory,* pp. 235–236.

from the wheel of birth and rebirth and sped her on the way towards the divine. For, if the mind wiped from its surface the passing show of the sensible world, and, turning to the pure and eternal Forms, made itself a mirror of true Being, it put off the substance along with the shadow of corruption and mortality, and partook once more of the eternity and perfection of the Reality which it reflected. "Happy and Blessed One thou shalt be God instead of mortal." [22] The philosopher, then, was vouchsafed more than practical wisdom and more than insight into the true nature of the universe. He was also a religious initiate who had received a kind of grace. In the world but not of it, he was following the path of a mystical conversion and salvation, at the same time that he trod surely and firmly the ways of earth.[23]

Plainly enough, a study of such concern to both the material welfare of the state and the spiritual redemption of the individual must require a long and arduous course of preparation. And as plainly, no sufficient preparation could be found in Athenian education as it stood. The Sophists, to be sure, had a larger mental horizon and helped draw attention to new studies, some of which, like mathematics, Plato considered of great value. But they dished out both the old and the new knowledge in the form of practical, business courses in rhetoric, aimed no higher than vocational training and professional success, which limited the vision, debased the ideals, and coarsened and enfeebled the mental fibre of their clientele. It was useless to look in that direction for any sound preparatory system.

Again, the old curriculum of the "humanities," literature and music, might put the mind in touch with nobler things and offer it a fairer field more worthy of its efforts. But it was not in itself sufficient to expand and train fine the intellect, which without further exercise might run to superficial and dilettante fat and flabbiness, instead of putting on sound muscle. For, we must remember, the Greek had no "classics"

22 Orphic Tablet (trans. Harrison), *Prologomena,* p. 669.

23 For Plato's philosophy as a "conversion of the soul" and a "service of mankind" *cf.* Burnet, *op. cit.,* p. 218, § 168, Barker, *op. cit.,* p. 211.

to give thew and sinew to a purely literary and humane culture. The study of his art and history and literature could not discipline and ennoble his point of view as it disciplines and ennobles ours. However keenly he may have felt the greatness of his civilization, he was too close to it to see it in proportion and perspective and win from it a vision of what is truly great, universal, and enduring in human life. To have reached that vision, he must have stood off from his own day and beheld it mirrored in some revelation of the human spirit in the past, so remote and so detached, so complete and so splendid, as to catch and focus the otherwise scattered and uncertain meanings of the present, and to reflect from them, in a clear and steady light, only what in them belonged to eternity. But the Greek, unlike ourselves, had no such mirror of ancient experience and achievement in which to study and understand himself and his times, and to see his own image transfigured by the spectacle of all time and existence. Nor had he, as we have, at the root of his tongue great "dead" or, in other words, perfectly formed and finished, languages to stiffen by the iron regimen of grammar and translation a "cultural" training, and to give to it a disciplinary value comparable to that of the higher mathematics and the exact sciences. In a word, his own literature and speech were for the Greek almost as slight an incentive to a just and comprehensive view of life, and as inadequate a basis of education, as the study of English and of our own times without a drilling in Greek and Latin and a knowledge of classical culture would be for us. He was forging an unsurpassed instrument for the schooling and the salvation of future generations, but, though he might save others with it, himself he could not save.[24]

Plato seems to have felt this difficulty, though naturally he could not guess its cause. At any rate, though he sympathized with the purpose and respected the honesty that inspired attempts like those of his fellow and rival professor Isocrates to

[24] *Cf.* Burnet, *op. cit.*, p. 217, § 166, on the deepening of "humanism" first in Roman and then in Renaissance culture owing to the progressive acquisition of more and more "classical" background. *Cf.* also the Essays on Greek Literature by Livingstone and Greek History by Toynbee in *The Legacy of Greece* (Oxford).

use the "humanities" as a vehicle for a really sound and liberal education, the attempts themselves he viewed with distrust.[25] This sense of the general inadequacy of such studies as literature, grammar, and rhetoric was doubtless reinforced by his own particular quarrel with the arts. To that quarrel we shall come presently. But for the moment suffice it to say that the same influences as led Plato to burn his own poetry, and, metaphorically speaking, at least, to throw aside his brush and break his lyre, brought him finally to the opinion that the function of all art should be moral edification, and that hence nothing should be read or heard that did not chasten and steel the soul and render her more austere and more detached. Only, then, a highly censored and expurgated literature and music, at the best, could have found any place in his scheme.

Plato had, then, to look elsewhere than to the existing systems of education for the preparatory studies that he desired. He found what he wanted in mathematics. He was keenly interested in them himself, and they already took a prominent place in the Pythagorean discipline which he so much admired. Moreover, here was a study admirably suited, it might seem, to freeing the mind gradually and gently from petty and personal affairs and interests, and to accustoming it little by little to think serenely in impersonal, abstract, and universal terms. No more suitable preliminary training could be conceived for the final, difficult effort of dispensing with every aid of sense and imagination and grasping the Forms of temperance, and justice, and beauty, and goodness, and all the rest, denuded of all illustration and example, simply in themselves.

In the *Republic* Plato constructs in detail the mathematical mill through which, in his opinion, a man must pass, if he is to acquire the elevation, breadth, and justness of vision indispensable to the art of government. And it seems probable that he introduced, so far as he could, much the same curriculum into his own school.[26] If this be the case, after being

[25] *Cf.* Burnet, *op. cit., loc. cit.*

[26] *Cf.* Burnet, *op. cit.*, p. 223, § 173.

perfected in the more abstract bearings of arithmetic, his pupils took up the study of plane, and then of the still undeveloped solid, geometry of the day. After that came astronomy, or the knowledge of the true as opposed to the apparent motion of the heavenly bodies, and harmonics, or the science of the laws underlying sounds and particularly their musical relations. Other sources indicate that considerable attention was also paid to problems of biology and botany and geology, and that the Academy had scientific apparatus, such as maps and astronomical models, and also museum collections.[27] And finally, of course, after the mind had been sufficiently exercised in precise and abstract thinking, came the crowning philosophy or *dialectic*—the understanding and application, without recourse to material aids like apparatus or diagram, of the universal Forms and principles which, in Plato's opinion, constituted true Being.

The next twenty years of Plato's life were devoted to the development of the Academy. He was building better than he knew, for he was really founding the first university in Europe. Thanks to him the Periclean dream of Athens as the "School of Hellas" came in a sense true, and even during his life the city gained the intellectual and educational pre-eminence that she was to keep, in reputation at least, for some eight hundred years. The old days when science and philosophy had to be imported from abroad were over. Foreigners now came to her, not to give but to receive instruction and inspiration. She did not, to be sure, succeed in capturing immediately the Ionian market for the export of her intellectual wares, or the Magna Grecian except for the brief philosophic raid on Syracuse. Pythagoreanism and the brilliant Ionian tradition were both too strongly entrenched on their native shores to invite competition, and the earlier rolls of the Academy contain comparatively few names from Italy and Asia Minor. But pupils came in abundance from northern Greece, Macedon, Thrace, and Greek towns on the shores of the Propontis and the Black Sea, and Plato soon found himself the centre of an enthusiastic

[27] *Cf.* Burnet, *op. cit.*, p. 223, § 172. *Cf.*, however, also Gomperz, *op. cit.*, Bk. V, ch. 21, § 2.

group of students of mathematics, science, and philosophy, which continually grew in number and prestige as time went on. To mention a few picked at random from the forty years that Plato taught, there were his nephew Speusippus and Xenocrates, both destined later to head the Academy, Eudoxus, the most famous astronomer of the day, who came first in the early days of the school as a youth of twenty-three, and some two decades later returned with a band of pupils of his own which he had gathered about himself at Cyzicus on the sea of Marmora. Nor should we forget Aristotle, son of the Court physician to Amyntas II of Macedon, who turned up at the age of eighteen, when the Academy had been going for some twenty years and was at the height of its fame.

For the most part, too, the young Academicians belonged to rich and powerful families and even to ruling houses. Among them, for example, were the prince Dion, who had followed his beloved Plato from Syracuse, and three young men who were eventually to control the destinies of Arcadia, Elis, and Byzantium—not to speak of the Prince of Atarneus, the friend and uncle or brother-in-law to be of Aristotle. It might almost seem to Plato that he was actually realizing a part, at least, of his hope and turning kings, or at any rate those in high position of authority, into philosophers. Nor was the reverse process of turning philosophers back into kings any less successful. Though a number of his pupils took to an academic career, so many descended again to the lists of practical life and became law-givers, governors, military leaders, and even would-be despots, that later detractors accused him of having founded a school for making tyrants.[28]

The charge was perhaps not without its grain of truth. Plato's interest in politics tended to wax rather than to wane with the passing years, and the practical problem of establishing good government here and now had become, if anything, more absorbing than the vision of the abstract good or of the ideal state. This interest, to be sure, was suffused in his mind

[28] Athenaeus, XI, 508 D ff. *Cf.* Zeller, *op. cit.*, p. 30, note 64. Burnet, *op. cit.*, p. 219, § 168. For a list of Plato's pupils *cf.* Zeller, *op. cit.*, p. 553, note 1.

with a growing austerity in morals and by projects of religious reform that verged on theocracy. And these, in their turn, seem to have sprung from an ever intenser conviction that the world could be saved only through conversion to a rigidly ascetic discipline of life. Still, what drew and held a large proportion of his pupils was not so much his fame as a philosopher, or his programme of moral reform, as the instruction he gave in constitutional law and the art of statesmanship, and the Academy was winning its reputation in Greece as a school no less of the political sciences than of philosophy. Moreover, as Plato came to closer grips with the conditions of his day, he saw more and more clearly the impossibility of putting into effect the scheme set forth in the *Republic*, and his political theory became increasingly realistic. He looked now for his inspiration to systems that had already been tried out, and was inclined to favor a combination of the advantages of tyranny, which was on the rise again, with the best points in democracy. Sparta, with its moderate socialism, its two kings subject to the control of ephors or warders, and its general system of checks and balances, he perhaps regarded as the best government in existence, and the most practicable model for other states. However that may be, we find in the later dialogues a growing inclination to advocate as the best form of practicable government the rule of a single monarch constitutionally limited by law and by the consent of the state as a whole. And it was with this doctrine that Plato inculcated his pupils, and this monarchical ideal that he urged them to realize.

Almost immediately, too, the Academicians seemed to have aroused a certain resentment in some quarters. Their aristocratic tone, their good form and breeding, and the correct way in which they turned themselves out and carried themselves, were all the more marked by contrast with the studied hearty naturalness, untrammelled by any consideration of conventionality, manners, or even propriety, that marked the behavior of the pupils of Antisthenes' rival institution. Thus they quickly got the reputation of a "manner," which, like the traditional Oxford or Harvard manner of to-day, irritated

and excited the ridicule of those who did not possess it. The comic poets were quick to scent a new prey, and the "Academy" hair-cut, and the "Academy" walking sticks, became a target for their jokes.[29] In some cases, moreover, this ridicule seems to have been really deserved. The Academic authorities themselves were apparently somewhat exercised over the lack of philosophic simplicity in dress and deportment that marked their students. The young Aristotle, if ancient report is to be trusted, was an object of special concern. He was a good deal of a snob and poseur, who talked with an affected lisp, and a great deal at that, and figured prominently in the ultra-stylish undergraduate set. He was inordinately preoccupied with the adornment of his person, and the exaggerated cut of his clothes, his too carefully barbered locks, his habit of going daintily shod, and his passion for rings, are said to have greatly annoyed Plato.[30]

The demands made upon Plato by teaching and administrative duties can have left him little time for writing. He had finished the *Republic* and perhaps written the *Phaedrus* in the first years of the school.[31] And now there occurs an interval of literary silence. But the temporary cessation of the Dialogues does not indicate any halt in his philosophic activities. He was turning things over in his mind under the stimulus of his lectures and conversations with his pupils and of the attacks of his opponents, and new and important developments were brewing. If we are to regard all the previous dialogues as essentially a presentation of other people's doctrines, we must think of Plato as now becoming critical of his masters and as striking out for himself and meditating a system of his own. If, on the other hand, we believe that from the beginning Plato put his own opinions into the mouth of Socrates, we shall perhaps imagine him as seeing his ideas in new lights and from new angles, and discovering in them fresh difficulties and problems, suggested perhaps by hostile criticism, which re-

[29] *Cf.* Gomperz, *op. cit.*, Bk. V, ch. 1, § 6.

[30] *Cf.* Aelian, *Varia Historia*, III, 19.

[31] *Cf.* Burnet, *op. cit.*, p. 212, § 162. Raeder, however (*Platons Philosophische Entwicklung*, pp. 278–279), places the date of the *Phaedrus* after 380 B. C.

quired a further statement, and even a revision to some extent, of earlier views. The first fruits of this period of seeming quiescence but of inward ferment were the *Theaetetus* published, at a guess, not many years before 368 B. C. And the *Theaetetus* was followed, at just what intervals and in just what order it is impossible exactly to determine, by the other so-called "critical" dialogues: the *Parmenides*, *Sophist*, *Politicus* (*Statesman*), and *Philebus*.

This new flow was, however, interrupted by disturbing and important incidents. In the year 367 B. C., Plato's old acquaintance, Dionysius of Syracuse, died. He was sixty-three and had reigned for thirty-eight years—which was something of a record for a tyrant. What is more, he was able to hand on his throne and a great empire to his son. But the younger Dionysius, at the time of his accession a man about thirty, was quite unfitted for the task that devolved upon him. By nature he seems to have been intelligent and not without promise. His father, however, whose reign would not in other respects recall the Victorian Age, anticipated to the full the late Queen's jealousy of the royal prerogative and exclusion of the heir apparent from all participation in affairs of state. And in Dionysius' case the distrust and suspicion were carried to such a point that the prince was left almost without training or preparation of any sort. Consequently, when he finally did come to the throne, he was quite at sea and turned for support and counsel to his uncle Dion, Plato's bosom friend and erstwhile pupil at the Academy, who thus virtually became regent.

The new reign, under Dion's guidance, opened well. The legacy of the Carthaginian war, left by Dionysius I, was converted into an advantageous peace which left the Empire unimpaired. And generally, the young tyrant, conscious of his inexperience, proved amenable to good advice. He was, moreover, not only aware of his shortcomings and of his need of education, but he was also eager to make good his defects and fit himself to rule. Dion, who was without personal ambition or desire to usurp the royal power, sympathized with these aspirations and was quick to suggest a means of satisfying

them. Obviously the man to take his nephew in hand was his admired Plato, whose school was fast getting the name of a veritable training field for princes. It was, however, manifestly impossible to send the reigning monarch of an empire like the Syracusan to Athens to study at the Academy. Perhaps, however, in view of the exceptional circumstances Plato could be persuaded to take leave of absence, come to Syracuse, and undertake the job on the spot. Dionysius himself greeted the idea with enthusiasm. In any case it could do no harm to write and see. The young tyrant sat down and composed a formal but cordial and pressing invitation, and Dion accompanied it with letters explaining the situation and urging Plato to accept.

Plato must have received these communications with mingled feelings. He was sixty, and for the last twenty years he had not stirred from Athens. He was the head of a rapidly growing college, famous throughout the Greek world, which it was hard to trust to other hands, even temporarily. His memories of Syracuse were not alluring. Of the young man himself he knew nothing at first hand—he vaguely remembered, perhaps, a badly brought up little boy some seven or eight years old, but that was all. The father, however, he recollected only too well, and he had only to turn back to certain passages in the *Republic* to refresh any impression that might be in danger of fading. Age, habit, the pressure of business, memories—all inclined him to refuse.

On the other hand times had changed. His "old boy" and devoted admirer, Dion, was now in the saddle. Accounts of the younger Dionysius were not unfavorable, and Dion wrote that his nephew had possibilities, was eager to learn, and was really keen on Plato's coming. Here was a chance to try the great experiment on a large scale and train a philosopher king of the first magnitude. A further incentive was perhaps furnished by the success of the Pythagorean philosopher, Lysis, in moulding the Theban statesman and general, Epaminondas, a man of the highest ability and noblest character, whose personality at the moment was overshadowing all Hellas. Dion was importunate. The Pythagoreans in Italy, it seems, added

their prayers. The force of circumstances was too overwhelming, the temptation too strong, to be resisted. Plato delegated the management of the Academy, and left for Sicily with a part of his school trailing after him.

Dion had not exaggerated his nephew's sentiments. Plato was met at the dock by the royal carriage and driven in state to the palace, where he was received by the tyrant with open arms. It must have been annoying, to be sure, to find waiting to greet him two old fellow disciples and philosophers for whom he had scant love, Aristippus of Cyrene, and one Aeschines, son of an Athenian sausage maker, and whilom favorite pupil of Socrates, who had gone bankrupt in the perfume business and run away from Athens to dodge his creditors. Still, these after all were only small flies in the ointment of success. At first all went swimmingly. The education of the royal pupil began at once, and a stiff course in mathematics was naturally prescribed. Dionysius took the first doses at least, standing and smiling, and persevered for a time in the treatment. The Court exhibited a like zeal and grit, and for some weeks the sand in the courtyard and garden paths of the palace was wrinkled with geometrical figures and demonstrations painstakingly traced by the tips of the most fashionable walking sticks in Syracuse. The philosopher-king and the perfect state, it might seem, were not merely patterns laid up in heaven, after all.

But all this was too good to last. Dion, like any man, however upright, in the same position, had enemies jealous of his power and eager to undermine his prestige. The conservative die-hards and old-timers left over from the former régime had little use for philosophers and none at all for philosopher-kings, and viewed Plato's radical experiments upon their sovereign with anything but satisfaction. The disaffection came to a head in a cabal led by Philistus, one of the literary lights of the old Dionysius and also one of his ablest ministers, who repaid in this way recall from the exile to which the suspiciousness of his late master had eventually condemned him. The young tyrant's ear was gained. Perhaps mathematics was beginning to pall, and he was tiring a little of being put through

his paces, and was beginning to be restive and impatient of restraint. Whatever latent jealousy he may have had of Dion's assumption of authority was carefully fanned. Letters written by his uncle to the Carthaginians in connection with the peace negotiations were shown him and given a treasonable twist. These machinations succeeded only too well. Within four months of Plato's arrival at Syracuse Dion had been exiled from Sicily. His enemies were delighted, but he had many friends, and his going excited deep resentment, especially among the liberals, who had looked to him for the establishment of a constitutional monarchy.

The old guard must surely have thought that the objectionable Plato would depart with him. And Plato himself was only too eager to go, for he was disgusted and disillusioned by the turn events had taken, and was probably willing to yield the palm, so far as the conditioning of philosopher-kings was concerned, to the trainer of Epaminondas. But Dionysius, though his enthusiasm for instruction might have flagged, had taken a real and ineradicable liking for his teacher. With Dion about, three had been a crowd, but now that he was gone the tyrant hoped to have his dear philosopher to himself and to monopolize his attention and perhaps his affection. Plato, for all his protests, might have been indefinitely detained by this embarrassing devotion, had not an outbreak of war come to his rescue. The course of studies had perforce to be broken off, and Dionysius reluctantly let him go. But he exacted a promise of return after the war, which Plato gave on condition that Dion also should be allowed to come back. Plato crossed to Italy, stopped awhile with his old friend Archytas at Tarentum, and then went home.

The next five years he passed quietly and agreeably enough. He took up his teaching and the management of the Academy again and went on with the composition of the "critical" dialogues. He may even have made a beginning, in his mind at least, with the *Laws*, his last work and a product of his old age.[32] To add to his pleasure, Dion, who had been making an almost royal progress through Greece, crowned at Lacedae-

[32] *Cf.* Burnet, *op. cit.*, p. 301, § 224.

mon by the signal honor, rarely accorded to a foreigner, of full Spartan citizenship, now came to Athens and settled there. The exile, as we may imagine, was received with the utmost cordiality by the Academy. His personality won him many friends and sympathizers, and he became especially intimate with Speusippus.

At Syracuse, meantime, the war had come to an end and Dionysius was beginning to mope for his old teacher. He wrote reminding Plato of his promise and begging him to come back. At the idea, however, of recalling Dion he balked. The breach between the two had, if anything, widened during the exile. The honors with which his uncle had been showered no doubt seemed like so many personal rebukes, if not insults, to himself; and moreover, Dion was the natural rallying point for all the disaffected elements in Syracuse. Plato, however, stood firm and refused to budge without his friend. Then, too, he was getting old, he dreaded the voyage, and he had no desire to tempt Providence again. But Dionysius nagged, and Dion himself, who had never ceased to hope for a reconciliation with his nephew, urged Plato to go and see on the spot what could be done. Archytas added his entreaties, pointing out that Dionysius was a changed man, and that he was really interested in philosophy and had even tried to go on with his mathematics by himself. Very likely, too, hope sprang eternal in Plato's breast. Who knew but there was still a chance for carrying out the great experiment if only he and Dion could get control once more? In any case he finally gave way. The tyrant sent a warship to fetch him, and for a third time Plato was on his way to Sicily, accompanied, it would seem, by his nephew and several other disciples including Xenocrates. (361 B. C.)

The new journey, however, only repeated the disaster of the preceding trip on a larger scale. At first, Dionysius was enchanted to have his philosopher back, and the group were hospitably received. One of them made a great stir by predicting an eclipse of the sun, and the unworldly Xenocrates created scarcely less astonishment when he declined to keep for himself a golden wreath that he had won as victor in a drinking-

bout. The lessons in mathematics were resumed. But, far from reconciling the tyrant with his uncle, Plato's efforts had the sole effect of arousing his jealousy still further, and of irritating him into the confiscation of Dion's great fortune, hitherto left intact. Angry and disgusted, Plato asked to go home, but Dionysius, having got hold of him at last, would not part with him and insisted on his remaining. A coolness fell between the two, ending in an open quarrel when Plato intervened to save an officer whom the king wished to make the scapegoat for a mutiny among the troops. He passed a miserable year virtually a prisoner in the palace garden. The army, to which reform of any sort was anathema, hated him and even threatened his life. At this point the Tarentine government intervened, and Archytas made representations as a result of which the philosopher was allowed to leave. He landed in the Peloponnesus in July 360 B. C., met Dion at the Olympic Games, and with him returned once more to Athens.

Plato was now sixty-seven years old, but he still had thirteen years to live and teach and write. Such of the "critical" dialogues as had not been written before the last Sicilian trip belong to this final period, and to them were added the *Timaeus* and the unfinished *Critias* designed to supplement the *Republic*, and finally the *Laws*, and, if it be genuine, the *Epinomis*.[33] He had also other works in mind, as, for example, a dialogue to be called the *Philosopher*, to carry on the thought of the *Sophist* and *Politicus*, and another to complete the trilogy to which the *Timaeus* and *Critias* were designed to belong. And he perhaps carried on, for a time at least, a philosophical correspondence with Dionysius, who, in spite of their late unpleasantness, seems still to have asked his advice. But he was not pleased when the tyrant wrote a book that claimed to expound his views.

Politically, he was done with Syracuse. But he could not escape looking on awhile at the progress of the tragedy for which he was in part responsible. Dionysius had heaped insult upon injury on Dion by following up the confiscation of his property with the dissolution of his marriage, and had remar-

[33] *Cf.* Raeder, *op. cit.*, p. 413.

ried the unfortunate wife to a favorite of his own. All hope of a reconciliation was over, and Dion saw that there was no alternative between energetic retaliation and a tame submission. For three years he nursed his wrath and prepared his revenge, rallying to his cause, apparently with Plato's silent consent if not approbation, a number of friends from the Academy, among whom we may mention Speusippus, Eudemus, an intimate friend of Aristotle's, destined never to return, and one Callippus, a trusted comrade but later the Judas of the band. With them and some eight hundred mercenaries he set sail in August, 357 B. C. He was driven far south of his course almost to the African coast, and thus slipped by Dionysius and Philistus, who had expected him to come *via* Italy and were waiting for him there. In Sicily there were none to oppose and many to welcome him, and his march on the capital from the southern shore where he landed was a triumphal progress swollen by new adherents from every side. All Syracuse acclaimed him, with the exception of the citadel which was still held by Dionysius' troops. The letter is still extant, though its authenticity is disputed, that Plato is supposed to have written him, congratulating him upon his victory, warning him against too great haughtiness and inflexibility in the hour of triumph, and begging him to remember his education and rule as one trained at the Academy should.

The victory, however, was short-lived, and the next turn in events was such as to bring shame and sorrow upon Plato. Dionysius, to be sure, was soon disposed of, and, after a crushing defeat in which Philistus was killed, fled to Italy. But Dion could not cope with intrigue and treachery at home, and after a brief and precarious tenure he fell, stabbed by his trusted adviser and fellow Academician, Callippus. For a year Callippus maintained himself in power, and then was driven out by Dion's friends, eventually himself to fall by the knife. The episode could not but bring the Academy into disrepute and afford ground for the reproach that it bred tyrants and backbiters, and Plato, apart from the grief caused him by the loss of Dion, must have felt the scandal keenly. Nevertheless, he seems to have been still ready to give an opinion as to the

best form of government for Syracuse, when Dion's avengers turned to him for counsel. His advice, however, was too sensible and generous to be followed.[34] A period of anarchy ensued, and the government changed hands three times, falling at last into the clutches of Dionysius again, in 346 B. C. But it was not for long. The tyrant was immediately shut up by the combined forces of Leontini and Carthage within the walls of the city that detested him—till all three were sent packing by the genius of the Corinthian general, Timoleon, who had been despatched by the mother city in response to the frantic appeals of the Syracusans for help against their foes both within and without. Dionysius retired to Corinth, where, after a long life of exile, he finally ended his days. He had turned schoolmaster and mendicant priest, and his eccentricities and his real wit made him one of the sights of the city, scarcely less noteworthy than that other monument, Diogenes. Timoleon set Syracuse on her feet again, and governed wisely and well, and, had Plato only lived to see the day, he might have felt that at last the city from which he had hoped so much and met with such disappointment was ruled as he would wish it.

But he had been dead for ten years, and the concluding scenes of the drama—the brief reinstatement and final deposition of Dionysius, and the coming of Timoleon—were played after he had left the audience. His last days—he died in 347 B. C. at the age of eighty—had been serene and happy except for his distress at the assassination of Dion and the treachery of Callippus. He had made a great name for himself, not only as a philosopher, but as a teacher, a political adviser, and an expert in statesmanship, to whom legislators and rulers turned for advice; and the school that he had founded had become the foremost centre of learning in all the Greek world. Also, besides this public reputation, thirty years or more of teaching had laid up for him a vast private treasure of affection and respect, the gift of many generations of pupils. Physically and mentally he was still active and alert, and instead of resting on his laurels he had gone on to the end with

[34] *Cf.* Burnet, *op. cit.*, p. 299, § 223.

his literary work and the direction of the Academy. Indeed, Cicero tells us that he died in harness, writing.[85] But we need not take this statement so literally as to exclude another story that death came on him swiftly and gently one day, when he was the guest at the marriage feast of a friend.

[85] Cicero, *De Senectute,* V, 13.

## CHAPTER V

## PLATONIC LOVE

### I.

In turning at last to consider the Platonic philosophy we shall do well to loiter awhile before the newly discovered portrait, supposedly of Socrates, which we were discussing in the second chapter. As we have already remarked, it is almost the replica of a painting hitherto and, for that matter, still commonly believed to represent Plato in his prime, and if it be really Socratic instead of Platonic, our estimate of Platonism must undergo considerable revision. Indeed, it leaves us to the comparatively "professional" features of the picture that looks down upon us from the later, critical dialogues for our only trustworthy likeness of Plato as he really was. If this be the true man, we should have considerably contracted the present chapter and treated more at length in connection with Socrates much that we are now about to take up.

That we are holding in our treatment of Plato to the traditional and more conservative hypothesis need not imply, however, any enmity to the new view or more than an attitude of benevolent neutrality in the controversy. As non-partisan spectators, it is not for us to take sides. But the features about to be discussed have to be dealt with under the one heading or the other. And while the point is still so disputed and the issue so in doubt, it is more discreet for us to accept as a working basis the attribution that not only is usual and popular but also has a great weight of expert opinion behind it. To the mere recorder and recounter of philosophic gossip like ourselves this course has the further advantage of allowing us to varnish our account of Plato with what has generally been regarded as most characteristically Platonic.

Moreover, granted that the *Phaedo*, the *Symposium*, the *Republic*, and the *Phaedrus* depict the true Socratic doctrine, the portrait, in the case of two men philosophically so closely related, may well be a good likeness of both. Certainly the impression the casual reader gets from these dialogues is that, although they may "profess to be the pictures of a generation that had passed away," they nevertheless set forth a philosophy that Plato, whether or not he originated it, has pondered deeply, accepted whole-heartedly, and made an integral part of his own system, for the time being at least.[1] We are then justified, I think, in having as a matter of convenience postponed to the present chapter a more detailed study of the painting whose salient features we have already noted. But we ought perhaps at this point to apologize for a certain amount of awkward repetition that our course will involve. The theory of Ideas, the doctrines of immortality and of knowledge as recollection, the unworldly and mystical elements in the Platonic point of view, will all turn up again in their old familiar guise, and much of what they have to tell us we shall have heard before. Still, some tales will bear telling twice, and it will not waste our time to give these points a rehearing. Moreover, taken in conjunction with Plato's later writings they assume a new significance which they lack if regarded as Socrates pure and simple.

There is another moot point, bound up with these considerations, that we ought to dodge, but with respect to which we shall be obliged to commit ourselves to some provisional hypothesis—the question whether and, if so, to what extent Plato changed his views as he grew older. This problem has given rise to very great differences of opinion ranging from assertion of complete alteration to equally positive convictions of no essential change. Upon the merits of the dispute we fortunately do not have to pass. But here again we must adopt a working hypothesis—which had perhaps better be the safe middle course of assuming a development in Plato's thought, even if there were no *volte-face*. For no critic, however staunch a defender he may be of the essential unity of the

[1] But *cf.* Burnet, *op. cit.*, pp. 212–213, § 162.

Platonic system, would maintain that it sprang from Plato's mind in one brilliant moment as full-fledged as Athene from the head of Zeus, or that it did not remain till the end an object of incessant meditation, to which he was always giving a final touch. Even after the period of essential formulation was over, there would still have been objections to answer, unexpected difficulties to meet, and frequent opportunity for extension and correction. Here, the theory of knowledge needed amendment, there, the good required more accurate definition. Or the thorny points of the status of the Forms and of their relation to particular objects might prove annoying from time to time. We shall suppose, then, that the Platonic system grew and had a history, and therefore can be traversed in easy stages. These stages, again, we shall make two, not arbitrarily and merely for convenience's sake, but in view of the fact that the Dialogues fall, roughly speaking, into two groups different enough in style and tone to raise at least a question and arouse a controversy regarding their relations. Accepting this cleavage with all due reserve, we may begin by discussing the doctrine set forth in the early and the so-called "constructive" dialogues—which, it will be recalled, is maintained by some critics to be Socratic rather than Platonic. After that, we may go on to note the further extensions and revisions proposed in the later "critical" group, remembering always that, if these same critics be right, this group is Plato's only really original and systematic writing. In the course of our journey we can examine at closer hand the difficulties and controversies whose outlines we have already descried from afar.

## II

The genius of Plato, like that of Shakespeare, does not lie in inventing new plots but in an intuition of the possibilities lurking in old stories. His philosophy gave no unexpected and spectacular twist to the current of Greek thought. It only, like some sudden pool in a mountain stream, gathered up all the divided and criss-cross rivulets of previous speculation and made for a space their confused waters one and clear and deep.

Into it poured both the unchanging Logos of Heracleitus and the sparkling change-whipped Flux tinted with its forerunning of Protagorean skepticism and relativism; the indivisible, unalterable, and colorless substance of the Eleatic One; the Pythagorean Forms and Numbers and the doctrine of preexistence and rebirth; the "Mind" of Anaxagoras; the Socratic Universals; and the Megaric teaching that the Socratic Good is identical with Eleatic Being;—not to speak of traces of more indirect seepage from Empedocles and the Ionians.

It would doubtless be safer to work towards the Platonic system along one of these contributory streams, the broadest and deepest of which is the Heracleitean philosophy. The Flux was one of the first things to catch Plato's eye and fire his imagination, and it remained for him, till the end, along with variety and multiplicity, an outstanding characteristic of the material world. And the Logos needed little more than a filling of Pythagorean Forms and Socratic Universals, each tagged with the attributes of Parmenidean Being, to become the realm of Platonic Ideas. But there is another way, more fascinating, though more hazardous, of approaching Plato. We may deliberately ignore the preceding development of philosophy just to see whether his system, when blocked off from the currents of thought that fed it, might not have still welled up spontaneously from an uninstructed and unbiased meditation upon the world. This plan has the advantage of enabling us to chance upon him simply and solely through our own experience. We shall be tracing the growth of his doctrine in the history of our own difficulties and speculations, and we shall find in him the outcome, not so much of his predecessors', as of our own philosophizing. We take a great poetic license, to be sure, in turning ourselves into Platos, however mute and inglorious, and in making him one of us. Still the risk is worth running, and Plato, or at any rate Socrates, would be the first to forgive us our attempt to bring a philosophy to birth from an intercourse of question and answer within ourselves.

Nor do we break so sharply with history after all. We shall rather see that the current of our speculations flows on

the whole parallel to it, just as the gestation of the human embryo recapitulates the stages through which the human species has evolved from its protoplasmic origins. For the first steps of everyone's independent thinking are apt to flounder in a Heracleitean flux. The old authorities and sanctions crumble in an initial flood of skepticism, and we find ourselves immersed in a Protagorean sense of the relativity and instability of all standards, beliefs, institutions, and ideals. We despair of truth and any fixed and enduring good. We mourn the irrecoverable beauty of Helen. We bewail the swiftness of all-devouring time, and the shortness and futility of our individual lives hurried so quickly to their end. We foretell the doom of our race sinking with its aging earth and failing sun to slow extinction or, it may be, hurled to violent death somewhere in the immensities of space, leaving no memorial or trace of itself behind, and having lived, it might seem, in vain. To say all in a word, for us as for the great Stoic emperor, oppressed by the same Heracleitean vision of ceaseless change, "Everything that belongs to the soul is a dream and vapor, and life is a warfare and a stranger's sojourn, and after fame is oblivion." [2]

Still, the fact remains that, however plausible the Sophistic relativity and agnosticism may be, we can never succeed in behaving as if it were true. We may be convinced of it in theory, we may defend and even urge it, but we always lack the courage of our convictions when it comes to the test of practice. Gorgias and Protagoras themselves, as we saw, were in their conduct pillars of the established order, natural, moral, and social, which their teaching left without a leg to stand on. Nor is the reason far to seek. Life, however much we may argue with it, stubbornly refuses to be lived as if it were a flux and nothing more. In fact and action it defies our logic and cannot be dissuaded from seeming to have structure and coherence. It may be that its substance is ceaseless change and movement, and that both the film of becoming and the screen of sense are being unrolled at a speed too quick for thought to overtake, but the fact remains that the picture cast by the one upon the

[2] Aurelius, *Med.*, II, 17 (trans. Long).

other is fixed and persistent and not too flickering for the mind to imagine in it a scene and a plot with a consistent history. In short, there is something, even if it be only illusion, that redeems our experience from the chaos and delirium it logically ought to be, and gives to it the value and meaning of a rational life in a stable and enduring world.

Now, unless we have been made too giddy watching the flux through the Sophists' eyes, we may begin in time to grow skeptical of our skepticism and to wonder a little about this inexplicable semblance of stability in ourselves and our world. We may still distrust it and feel that it can have no real basis, but we may at least be tempted to investigate and analyze it. And the moment we do so, we shall find that we are after all only following in Socrates' footsteps. For we shall note that the surface of the stream of change and becoming is, after all, not utterly boiling and confused, but is everywhere pitted with eddies, each one of which occurs at a given place from which it is never moved by the swirling current, and has a constant shape and size that are never altered by the rush of the waters that it is forever sucking in and disgorging again with such incredible rapidity. Moreover, we shall also note that not a drop in the torrent of existence escapes these whirlpools. The whole flow passes through them and is divided up among them, and the content discharged by one is immediately appropriated by another. Thus, throughout its entire length and breadth the straightaway plunge of time and change is deflected and broken up and arrested by a myriad fixed points of reference and classification, about some one of which every bit of our experience, however fleeting, is visibly revolving at any given moment. Our experience, instinctively it might seem, recognizes likeness and difference in its hurrying content, remembers the old and contrasts or associates it with the new, tags each event as it comes, and puts it in the same class with something else. Individual things come and go in an unremitting process of generation and dissolution, but the forms they take on, the natures they assume, remain without any alteration or shadow of turning, undisturbed by their passing. The beauty of Helen long since perished from the earth, but the face that un-

veiled itself in her still launches, generation after generation, its thousand ships. And though you and I die and are seen no more, the human form which we have embodied for a moment, each in his own way, does not disappear when we are destroyed, but goes on manifesting itself in those that come after us, so long as mankind shall last.

Here, finally, we seem to have found the secret of the law and order and rationality in our experience. It lies in just these common properties and values which, by linking up and uniting great masses of data swirling at random throughout space and time, give us a kind of map or chart of the stream of sensation, and enable us to distinguish, locate, and classify its contents. Indeed, without these groupings and generalizations experience could not even coagulate into the lumps of sensation we call *things*, for it is impossible to have a thing that is not also some *kind* of thing. Were it not, then, for this tendency in events to proceed along certain definite lines and formulate themselves in certain invariable ways, life would be sheer madness without even the method of a mania, and the universe would be utter anarchy and chaos.

But there is something else, too, that might strike us about this tendency of experience to sort out and classify its material and cast it into forms. It is not a neutral and mechanical process. It is rather something that experience seems to be wanting and trying to achieve, or in other words, an ideal that experience is intent on realizing. For instance, if an event presents itself that is not wholly true to a type of some sort, and that refuses for the moment to be classified in all respects, the mind is all of a flurry with uneasiness and irritation, and falls to brooding and puzzling till a place has been found for it. And then the instant the thing has been tagged we heave a sigh of relief at having, as we say, finally *explained* the thing and at now *knowing* what it is. Experience, that is, looks as if it were always trying to read some sort of meaning into itself as it moves. It imagines itself, at any rate, to be all sorts of things, flowers and birds and beasts, men and Gods, wooded hills and flashing streams, blue seas and blue skies, the bright host of heaven, and even cyclone after cyclone of atoms

or electrons storming in unseen space. And the forms to which its imaginings keep reverting in this effort to make itself articulate and mean something have the value for it of a *truth* that it is striving to tell about its real nature.

But the suffusion of experience with this curious phosphorescence of "interest," "meaning," and "value" is even more striking in other phases of life than it is in the "love" of truth, the discomfort of the unexplained, and the comfort of knowledge. Sense data not only rush on and off the stage insisting that they *are* something, and demanding that, as we wish to be easy in our minds, we shall at once recognize *what* they are. Many of them also troop in lamenting and weeping, writhing in agony, objects of instinctive disgust and loathing, or, it may be, laughing and rejoicing, kindlers of hot desire, things of beauty which are a joy forever. This heavy charge of pain and pleasure, content and discontent, attraction and repulsion, borne by the crude flow of experience, electrifies the mind and provokes new groupings, not only of individual things but of whole classes, according as they are found desirable or undesirable, beautiful or ugly, morally good or morally bad. Thus, besides the general concepts responsive to the scientific interest in knowing what things are, there appear a host of other forms with which experience marks its moral or aesthetic disapproval of things as they stand, and expresses its ideals of what a world remoulded in conformity with its desires would be like. In fact, these would probably be the first forms to catch our eye and in any case to engage us in philosophic meditation. Knowledge of the truth is notoriously less alluring than that of good and evil. Such homely groups as cats and dogs, lamp-posts and stars, houses and motor cars, we are apt to take for granted, and the further analysis of their contents into the forms discovered by science is not half so interesting as thinking over the problems of human conduct and trying out the proper nature of right and wrong. At least, so Socrates and the youthful Plato found it.

And so, by our own road and at our own pace, discovering by the way the Logos in the Heracleitean flux, we have caught up with Socrates, and can now understand his hope of finding

beneath the intricacy, the vacillation, and the seeming relativity of human behavior certain general principles of conduct which, once unearthed, would prove to be the foundations of a universal and authoritative moral order. By much the same road Plato, too, appears to have reached a like conclusion. He had been led to the waters of Heracleiteanism and Sophistic skepticism by Cratylus, his first instructor in philosophy, and if he could not be made to drink, it was in part the hand of Socrates that had restrained him. We shall not be surprised then to find him puzzling with Socrates in his earlier dialogues over moral qualities like courage [3] and temperance [4] and piety [5] and justice,[6] and tending always to the belief that the common names applied to the various instances of the virtue in question implied the existence of a common nature or form of which these instances were concrete manifestations and to which they owed their special cast. Nor was it more than a step to the opinion that there might be an essence of virtue in general which enabled us to detect in such different flavors as, say, courage and temperance, a common odor of sanctity.[7]

But we must also have realized by this time that these glimpses of fixity in the flux do not herald an end to our journey. They only announce its beginning, and prophesy its difficulty and its length. In the first place our Sophist friends and their Cynic and Cyrenaic disciples are still standing by, whispering that these seeming eddies in the flow of sense, which give it an apparent structure, are not really there at all, but are optical illusions pure and simple. Nay more, they would say, although it is certain that we are all only "seeing things," there is no reason to suppose that the hallucination is collective and that, when we all suddenly cry out "cat" or "dog," what you see resembles what I see. Common names, then, have not even a fictitious reality or validity.

It is plain that, if we are to move on, we must deal in some way with these paralyzing doubts. And when we come to Plato's ethics and theory of knowledge we shall find him

[3] The *Laches*.
[4] The *Charmides*.
[5] The *Crito* and *Euthyphro*.
[6] *Rep.* I.
[7] The *Protagoras*.

greatly exercised to refute the Protagorean skepticism. But after we have quieted our scruples on this score, we are not much forwarder, as we shall discover, for all our pains. Granting that the forms appearing in experience are not optical illusions, but are really there, how do they get there? The flux itself, which is through and through fluid, impermanent, and incomprehensibly swift in changing, cannot explain them. There is nothing in the inward sweep and glide of its current to account for the eddies which break up and retard its movement and set its contents revolving monotonously about fixed points. Nor is there anything in the mere occurrence and flow of sense-data to tell us why experience finds meaning and value in them and classifies them under certain invariable types. It looks very much, then, as if the flux were being interfered with from the outside, and as if we should have to take a new factor into consideration in order to understand why it assumes the shapes it does. Nor should we be too precocious if we had already come to share Plato's suspicions on this score. The behavior of the stream, we might feel, was due to the existence and nature of some sort of bed over which it was flowing. And might not the unvarying pattern that mottled its restless, hurrying surface with persistent shapes and colors be just an opaque and distorted vision of that bed, refracted from its depths? Where then we perceive forms and values and meanings in the passing show of sense-data, we are perhaps beholding not something superficial, but the deepest and most essential things in the universe. We may be actually seeing down through the unstable, gliding substance of phenomena to a world of eternal and unchanging types and laws, good at all times and in all places, which underlies the flux and constitutes the immutable foundation and bed-rock of Reality.

But before leaping to this conclusion we shall do well to look once more and in greater detail at these habits of knowing and loving which we find in ourselves. If we study them more at length, we may be spared the trouble of so long a jump, and may be able to confirm our suspicion, step by step, in an orderly and leisurely way. Let us pause then for a moment

and ask ourselves just what we do mean by knowledge and by love, and what their implications are. And let us, being human, take love first.

III

We shall get most quickly to the heart of this curious phenomenon of attraction and desire in experience, if we approach it as Plato did, on its most familiar and engaging side—the love that men bear one another. Nor can we study it more agreeably and to the point than by listening with him in the *Symposium* to the talk at the famous dinner party given by the poet Agathon, where Socrates, we may remember, showed how good a head he had for something besides philosophy. Among the other guests were Pausanias and Phaedrus, both prominent men about town with a pretty taste for literature and speculation, the physician Erixymachus, one of the best known doctors in Athens, and the great comic poet, Aristophanes—so that the conversation was bound to be many-sided and lively. And it lasted, encouraged by the equivalent of an excellent champagne dinner, till the small hours of the morning, when Alcibiades, very much in his cups, chanced in with a band of revellers and put an end to the discussion by turning the occasion into a drinking-bout from which Socrates emerged victorious.

In an earlier dialogue, the *Lysis*, Plato had considered the nature of friendship, and though he had reached no definite conclusions, he had apparently felt that the subject was of considerable philosophic interest. Indeed, he had intimated that the desire of friends for each other and the sense of fulfilment they enjoy when united must be regarded as part of a more essential yearning, deep-rooted in human nature, to embrace some final and absolute good, loved in and for itself, the possession of which alone brings true happiness and peace. In the *Symposium* the hint dropped in the *Lysis* is picked up and examined once more in an ascending series of speeches about the nature and meaning of love. The young Phaedrus sets the ball rolling with a rather fulsome and rhetorical encomium—a Platonic dig perhaps at the oratorical

affectations inculcated by the Sophists—in which he points out the inestimable benefits conferred by the oldest of all the Gods, the courage and shame of every unworthy act and thought that love inspires in lover and beloved alike, and the heroic deeds of self-sacrifice that have been performed in its name and to its glory. Pausanias, who follows, is more critical, though still in the Sophist manner. Seizing upon a distinction already made by Greek mythology, and thanks largely to his discourse forever after famous in European art and literature, he points out that there are two Aphrodites, an heavenly and an earthly, or, as it has come down to us, a sacred and a profane love. The one is fickle, sensual, and unscrupulous, and must be condemned. But the other, the sacred, in which the sexual base is transfigured and the affections are centred upon the mind and character of the beloved rather than upon his body, is pure and honorable and benefits lover and beloved alike. The turn then passes to the doctor Erixymachus, who extends Pausanias' distinction to the realm of physics and physiology, remarking the difference in desires between the healthy and the diseased organism, and attributing "acts of God" like storm, and pestilence, and famine, to the working of forces akin to the lower love. And after him comes Aristophanes, who dwells upon the restlessness and the wanting that make love so imperious and so unhappy, and points out, partly in earnest and partly in jest, why the lover feels that he is discovering and completing his own true self when he meets and possesses the beloved. In the beginning, he tells us, each human being was double, a pair of Siamese twins, as it were, welded together into a sort of ball with four legs and arms and two faces. In some the two halves were of the same sex, in others male and female were conjoined. Zeus, fearing the strength and agility of these creatures, cut them in two, and had the halves rearranged in our present human form. But we all carry with us the scar of this ancient severance, and we wander about the world restless and aching, looking for our lost halves. And not until we have found and embraced them are we really healed and "rounded out" and complete again. After this fashion—curiously prophetic in some ways

of the trend of our psychology of sex to-day—Aristophanes explains love in its three forms, of man for woman, and of members of the same sex for one another, and also the yearning to unite and fuse with the beloved, which is its essence. The modern young man, then, we may remark in passing, is really an unconscious classicist when he sings "There's only one girl in the world for me," or "God made thee mine," or when, after he has got her, he calls her, for a while at least, his "better half."

The stage has now been set for the entrance of Socrates. The previous speakers have suggested that love is the sign of a radical want in our natures, and has as its object something that complements and perfects them. In addition, Pausanias with his distinction between the earthly and the heavenly love has intimated that this object is to be found not in the flux of sense—which provokes only impotent desire and gives satiety instead of satisfaction—but in something immaterial and unchanging, or, as we to-day might say, spiritual. At least, no true and abiding happiness can be had from a love that does not fare beyond the body of the beloved to his soul and desire him for the beauty in him that is unseen. The speech, however, is given its immediate cue by a romantic, fulsome, and inconsequential outburst by Agathon—a deliberate parody, it would seem, of the poet's ornate and second-rate style—which affords Socrates a chance to intervene with his favorite pastime of question and answer.

Since love is the pursuit of a beauty and a perfection that it does not as yet possess, how can it, he asks, be the wholly divine thing that Agathon would have it? No, love stands halfway rather between God and man. It is born of lacking and of having, is the child of plenty and of want, and it is forever groping and crying for the beauty that irradiates all things, even as reason gropes for the truth in them. It is something far wider and deeper than personal affection; it is the aspiration of the finite, of the partial and the incomplete, towards the ideal that fulfils and perfects it. The "other half," then, of which Aristophanes was speaking, is really the Good, is that greater and nobler thing, whatever it may be, union with

which realizes our nature and brings us a happiness and peace that the world can neither give nor take away. And this higher beauty we desire to have and to hold forever, and to perpetuate ourselves everlastingly in its embrace—so that all love is also a yearning for immortality. Wherever we look throughout the length and breadth of love, we see this aspiration towards the eternal. What is the primitive rut, which by making living bodies beautiful and desirable to one another drives them to reproduce their kind, but a means of freeing the race from the death that overtakes the individual, and of rendering it comparatively immortal? Or, in the individual himself, take hunger and thirst which drive his body to replenish itself from day to day, and memory which passes on the experience and knowledge contained in each vanishing instant to the next, and thus builds up for him out of quicksand, as it were, a stable character and career. What are these but devices for rescuing him, body and soul, from imprisonment and death in the passing moment, and for giving him some measure of permanence and the immortality of a lifetime at least? And what again is the after-fame for which he strives and is willing, if need be, to die, but an extension of that immortality and a living on of the splendor of his life in the memory and character of those to come? Noble deeds and thoughts are children of the soul, begotten by the highest of all loves, the passion of noble minds for one another, and they redeem us from death and oblivion and make us part of eternity as no mere offspring of our bodies can.

We are now ready, Socrates continues, to be initiated into the final "mystery"—the true inwardness of that self-perpetuation in beauty after which all love, however gross or blind, is really striving. Let us, by way of introduction, recount the steps by which love mounts to its goal. Our first glimpse of beauty, our first thrill of desire, comes, as we have seen, from the charms of a beloved, and the young neophyte should eagerly frequent physical loveliness and undergo the experience of falling in love with a beautiful body. But this is only a beginning. For we shall soon realize that physical beauty is one and the same, no matter in whose charms it manifests itself,

and that the true object of our desires is not a particular body but rather the general quality of loveliness it shares with all other fair forms and faces. And to this more universal and more delicate beauty we shall now lift our eyes and hearts, abating our former infatuation for a single individual and considering it of small account. There is, however, yet another degree of initiation to be taken. There are also beauties of the mind of which we must now become the lovers. Such beauties are far more worthy of affection than mere comeliness, and are to be preferred, in the choice of our beloved, to physical charm. In union with the soul of the beloved we shall beget noble thoughts and learn to love the offspring of the mind—the great laws and institutions and strivings after knowledge in which it perpetuates itself. And finally we shall learn to incline our hearts to pure wisdom in and for itself, and to fix our desires upon the beauty of holiness, by which all great and enduring works are inspired.

We are now at the threshold of the last mystery. Each new beauty that we have perceived and loved in our ascent has after all been relative—the beauty of this thing or that. But what has really attracted us, and what we have loved in them all, has been their common quality of loveliness. The real object of desire, then, can be nothing less than this quality, nothing less than the lovable and the beautiful in itself distilled free of all admixture with any other nature. In other words, it is the abstract form or essence of beauty that is the "other half" and "true love" of all our seeking—beauty "pure and clear and unalloyed, not clogged with the pollutions of mortality and all the colours and vanities of human life," [8] but "absolute, separate, simple, and everlasting, which without diminution and without increase, or any change, is imparted to the ever growing and perishing beauties of all things." [9]

In the embrace of such a beloved, Socrates concludes, man becomes the friend of God and attains at last to true immortality, so far as this mortal may put it on. Further discussion, to be sure, is cut off by the entrance of Alcibiades, who proceeds to deliver a speech in praise of Socrates before be-

[8] *Symposium,* 211 E. [9] *Ibid.,* 211 B.

taking himself still further to his cups. But we have heard enough to be able to guess in what this true immortality, or self-perpetuation of oneself in beauty consists. Plato is not here thinking of personal immortality, but of something far less gross. Personal immortality, the mere going on of the soul after death, would not of itself suffice to rescue her from the flux, since what only continues, even if it go on everlastingly, is still carried on the bosom of time. But in the arms of absolute beauty the soul is lifted in some mystical fashion clear of time altogether. For beauty in itself—not the beauty of this or that, but the pure essence of beauty—can no more be pinned down to a given place or moment than can, for example, mathematical truths. Nor is it affected by the passage of time, or even by the sheer ending of time, any more than the laws of motion, say, move on with a moving body or cease to be valid when all movement stops. Such pure forms and laws hold good for all time, simply because they themselves stand outside of duration altogether. They belong in a world to which time is irrelevant. They are dateless and ageless. In short, they are not everlasting but eternal.

Now in consummating the essence of all desire in the embrace of the pure form of beauty, the soul, Plato feels, is somehow actually assimilated to the eternity of that with which she is united. In her absorption in her object she loses consciousness of herself, of her mortality, and of the passage of time, and becomes, as it were, identical with what she loves. Of this mystical self-forgetfulness and escape from the flux in union with the beloved we may get some faint foreshadowing in our own obliviousness to time and to ourselves, and in our identity with what interests us, when we are lost in an intensely engrossing book or occupation. We almost become the story we are reading, the game we are playing, the problem we are solving. The object of our interest and ourselves are made one thing, as it were, which exists in and for itself in a world where no clock ticks and no shadows lengthen, and where we are for a brief space, in our little way, immortal. How much more splendid, then, the immortality of a soul that has lost herself in the eternal object of all interest and all desire. She

is intent on something that has no beginning, no end, no varying episodes, no leaves to be turned over, no chapters to shift the attention. Moreover, as her beloved is wholly abstracted from the change and multiplicity of the things of sense and from all other natures save its own, so in like measure her union with it is undisturbed by the fringe of bodily sensation and movement, and of noise and color from the outer physical world, by which our pettier fits of abstraction are surrounded and harassed. And since mind and heart are one with the eternal, her life is for her an enactment, as it were, of eternity. The length of her life no longer matters to her. She has forgotten time in identifying herself with the timeless. It is in the quality, not the quantity of existence that immortality consists. Plato observes, to be sure, that the soul exists before birth and survives death. But such continuance would not be a putting off but a mere prolongation of mortality, did she not also worship

> "The deathless beauty of her guiding vision
> And learn to love in all things mortal only
> What is eternal."

True immortality, then, does not depend upon a future life. It is a disposition of the soul that may be attained within the limits of our allotted years on earth. For here and now, if only we will, we can rise above our mortality and give to our lives the value of eternity. It is true that freed from the burden of the flesh we may hope to soar more quickly and surely to those heights where there is no question or consciousness of "living on" at all. And it is this hope alone that gives nobility to the idea of survival. Indeed, we might almost say that for Plato personal immortality is simply a last desperate expedient in the series we have already noted for giving the soul a chance to escape from the flux of "living on" and attain the timeless existence of true being.

In another dialogue,[10] Socrates was to discourse once more of love, and in the same vein, lying on the grass with Phaedrus one summer afternoon in the shade of a lofty plane tree by the

[10] The *Phaedrus*.

cool music of the babbling Illissus. The subject of the dialogue is rhetoric, but it is opened by Phaedrus' reciting a speech of his favorite orator, Lysias, in favor of the non-lover rather than the lover as a friend, or, as we should say, of "Platonic" rather than passionate and romantic friendship. Socrates, after bettering the composition with an attack of his own upon the lover, suddenly veers and recants. He, no less than Lysias, has been blaspheming love. Love is really a sort of divine madness, an inspiration from a higher world, like the inspiration of the prophet or the poet, a rite of purgation, a mystery that heals and makes whole. Once again, however, and here Plato reiterates the point made in the *Symposium*, there are two kinds, or perhaps we should better say, two levels of love, a higher and a lower. The soul is like a charioteer driving a pair of horses, one of which is thoroughbred and docile to the guidance of all that is best, the other dark, vicious, and refractory, and ever excited by brute physical attraction and the desire for sensual pleasure. The course habitually begins by the vicious steed bolting in pursuit of bodily satisfaction. But he must be tugged back and disciplined by the soul that would enjoy the only true and satisfying love, of which the other horse with its obedience and steadiness is the symbol. A modicum of happiness and a glimpse of the ideal, to be sure, are to be had from the charms of the beloved's body, and some concession to the flesh is inevitable and not altogether to be condemned. For, we might comment, taking a leaf from the book of Freud, we cannot sublimate a passion unless it first exists, and to refine is not to destroy it. But the vision we get from this lower level is distorted and fitful, and the happiness fleeting, intermittent, and incomplete. Both the lover and the beloved, if they would reach the final goal of their yearning and attain true blessedness, must train the vicious steed to run in harness with its thoroughbred mate, and thus transfigure the lower into the higher love. Then "passing their life here in happiness and harmony—masters of themselves and orderly —enslaving the vicious and emancipating the virtuous elements of the soul,"[11] their love will bear them upward side by side,

[11] *Phaedrus*, 256 A.

without accident or fall, away from the mortality and corruption of the things of sense to the heavenly vision of what they really desire in one another, and to union with its pure and eternal essence.

There is more to the famous allegory in the *Phaedrus* than this, but the rest may well be left till we have examined the inferences drawn by Plato from the reasoning and knowing side of experience. Enough has been said to bring out, in connection with the discussion in the *Symposium*, the implications of love, and of interest and value in general. These implications, we see, make shrewd the suspicion, already half formed in our minds, that the behavior of experience cannot be explained on the supposition that we are dealing merely with a Heracleitean flux. For thought and reflection insist that the true object of love, far from being a sensible and material thing, can logically be found only in an immaterial and abstract essence existing independent of the world of sense and becoming. Furthermore, all our instincts and interests seem calculated to save us from being mired in the flux of matter and change, and, by attaching us to this eternal object, to render us, too, eternal. If this intangible form of beauty, which suffuses all things with the only loveliness they possess, has no real existence but is illusion, then love is indeed blind and deceitful. But, if we cannot trust the plain message of so deep and compelling a part of our experience as loving and valuing, experience is really so meaningless and reasoning so futile that thought and reflection of any sort are vain sound and fury signifying nothing, and that not even Protagoras and the other Sophists have any logical ground for their arguments and conclusions.

Moreover, Plato thought, it was not so difficult after all to find some sense in love and believe in the real existence of the suprasensible object to which it pointed. From the Eleatics and the Megarics he had already learned that Reality must be one, simple, indivisible, homogeneous, unchanging, without beginning or end, and his friend Euclid had gone on to argue that only Socrates' abstract Form of the Good lived up to these specifications. However that might be, it was obvious that im-

material and universal natures like that of goodness in itself or beauty in itself rang perfectly true when submitted to the Eleatic test. Particular objects, on the other hand, being multiple, conglomerate, unstable, and subject to birth and change and death, failed to live up to the definition, and therefore, despite their seeming solidity, must be regarded as comparatively spurious and unreal. For all, then, that individual things were so warm, so lovely, and so alluring, their tangible beauty along with their other material attributes collapsed at the first prick of logic, leaving as its real stuff an immaterial essence. Instead of its being far-fetched to believe in the real existence of an abstract and universal Form of beauty, it was only common sense and sweet reasonableness. Nay more, that was the only beauty in the real existence of which one could believe with any reason. Love, in a word, was not blind. It had the eye as well as the wings of an eagle, and its bow, though bent on a mark higher than the stars, was aimed at truth.

## CHAPTER VI

## PLATO'S ETHICS AND POLITICS

### I

If we reflect upon the language that we have used about love, we shall realize that we have been talking all along with a double or even triple meaning, and quite broadly at that. Not only have very suggestive words like "logic" and "reason" and "truth" been continually creeping into our vocabulary, but we have also frequently spoken of the discipline of love as if it were a "moral" process, and of the goal at which love is aimed as if it were a "good" in which the soul found "happiness." In the circumstances, these terms insinuate only too plainly that the distinction we made some pages back between love and knowledge is unnatural, and that the two are in reality intimately connected. After all, the desire to know is a passion for what we call the truth about a thing, and conversely the truth about beauty, that is, beauty in itself, is also the object of love in its narrower romantic sense. Knowledge, to be sure, is more promiscuous in its desires, since it seeks to possess the true nature not only of the beautiful but of all things. Its object, as we have already hinted, includes the abstract and universal Forms and Laws that explain *all* the characteristics and behavior of sensible things, whatever their "moral" and "aesthetic" values may be. Still, the "scientific" yearning to comprehend even ugliness and evil is an interest, nay, a passion, the satisfaction of which has a sweetness for the thinker akin to the consummation of love in the embrace of absolute beauty. Or, to put it the other way round, the truth, whether it be about the "morally" good, bad, or indifferent, has an intrinsic value, a lovableness of its own, for the sake of which it is pursued. It is then, no great leap from the subject of love to that of knowledge.

But it is even less of a jump to ethics. Love of a good of some sort, real or supposed, the yearning to remould the world according to the heart's desire, the passion for happiness—all these are the driving forces of human behavior and of "moral" conduct. And the loves that make the every-day world of our homely relations and activities go round somehow seem nearer and warmer than the scientific and philosophical love of truth whose nakedness looks a little chilly. We are notoriously more interested in ethics than in theories of knowledge. So, being still human and self-indulgent, and disposed to eat dessert first, let us postpone dealing with the nature and implications of scientific thinking till we have discussed Plato's moral theory and seen where it leads us. We shall find, moreover, that in so doing we are by no means slighting knowledge. In fact it will prove to be a sort of Siamese twin of morals, and there will be no getting rid of it. But we shall be all the better equipped eventually to turn to it for having treated ethics first. In fact, in taking up morals we are only coming back to our starting point, for we may remember that it was a consideration of moral qualities that first steadied us when we were drifting towards the relativism of the Sophists, and that set us on the track of the Platonic Ideas.

This intimate association of a theory of knowledge with a system of morals will not surprise us so much if we reflect that Plato was steeped in the intellectual and rationalizing spirit of Greek ethics in general, and fell heir to the Socratic teaching that virtue is knowledge, that no one does wrong intentionally, and that vice arises from ignorance of the true good. This teaching he accepted with some enlargement and modification in the early dialogues. In the *Ion*, we find emotion and inspiration discarded in favor of knowledge and insight as a guide to artistic creation and, by implication, to right conduct. In the *Apology* the impossibility of doing evil intentionally is reasserted.[1] In the *Laches* and the *Charmides* we have already seen apparently distinct and different virtues like courage and temperance both reduced, on analysis, to knowledge of what is truly good and truly evil. And in the *Crito*, where Socrates

[1] 25 D–26 A.

refuses to evade an unjust condemnation at the price of disobedience to the law, the superiority of this knowledge to every other influence and consideration is indicated in what might seem an almost quixotic manner.

The *Protagoras* pushes home the doctrine that the seemingly different virtues are really one and that their common and uniting bond is knowledge of the good. This is accomplished under the guise of an attack upon the opposed, Sophist teaching that the virtues are many and have no common principle. The dialogue takes the form of a discussion between Socrates and Protagoras, and the scene is laid in the house of one Cleinias, a rich Athenian, who is putting up the famous teacher during his stay in Athens. Thither Socrates is dragged from his bed early one morning by a young friend and aspirant for the new knowledge, to see and listen to the great Sophist. The debate is on when Protagoras claims that he can make his pupils better day by day by teaching them virtue. Socrates doubts whether virtue can be taught. If it can, why do the Athenians, who recognize in other things the difference between the taught and the untaught, allow the government to be run by all alike, without reference to skill and without reproach of ignorance? Surely it must be on the assumption that virtue is unteachable. Or again, why have good men so often bad sons and friends, who seem unable to profit by their teaching? [2]

These suspicions, however, are quickly allayed by Protagoras' reply. All men are not endowed with skill in the different arts, but all have been given virtue and political wisdom enough to help govern. Again, all procedure against crime is based upon the assumption that virtue can be taught. Punishment is for the purpose of prevention and correction, not for vengeance. The very fact, too, of education points to the same conclusion. Education is a process of instilling virtue. All men—not no men—are its teachers.[3]

Socrates, seemingly worsted, shifts his ground. Are the virtues one or many? Many, replies Protagoras, like the parts of the face, different from one another, and each with its special

[2] 318–320 B. [3] 322 D–328 C.

function. This position Socrates takes by a strategy of attrition. Different virtues are shown, one by one, to have the same opposite, folly, and therefore themselves to be the same, till courage alone holds out unreduced.[4] After a short lull, Socrates reopens the attack with a flanking movement, which results not only in the capture of the strong point in question, but in rendering one of the Sophists' main positions untenable. Are not pleasure and pain, he asks, the real good and evil? Protagoras demurs from so extreme a conclusion. He would feel safer in saying that there are some pleasant things that are not good, and some painful things that are not evil. But, persists Socrates, painful goods are only regarded as good because they bring more pleasure in the long run, and pleasures are only considered evil when their consequences are painful. The good, then, is the most possible pleasure when all is said and done. With this Protagoras, though hesitant, is in accord. But how are we to estimate the balance of enjoyment and to distinguish the present pleasures and pains that go to swell that balance from those that tend to overdraw it? Surely only by the use of knowledge and wisdom. But what is courage except action in the light of just such wisdom? Is it not precisely knowing what pains and pleasures are for the best in the long run, and hence are not to be feared? Its essence, then, must be the same as that of the other virtues.[5]

The two adversaries, as Socrates himself points out, have changed places during the argument.[6] The ground, indeed, has been dug from beneath both of Protagoras' feet, for he has contradicted himself twice over. In his eagerness to prove to Socrates that virtue can be taught, he has all but admitted that it is one and universal, an identical aptitude implanted in the breasts of all mankind. And his assertion that virtue is many, not one, has been shown to imply that it is unteachable.

The dialogue, however, for all its sleight of hand and the lightness with which Protagoras is let down, is a smashing attack upon the Sophists. When Protagoras is represented

[4] 329 C–335 A. [5] 349 A–360 E. [6] 361 A.

as recoiling from the idea that unqualified pleasure is the good, and as doubtful even whether a balance of pleasure in the long run is quite respectable, Sophist relativism, on its moral side at least, is reduced to an absurdity. The individual moment is not the measure of all things, after all. The good proves to be not that which appears good at the instant, but that which is weighed and tested by knowledge and reason as good in the long run. It is only the fool who plays the Sophist by looking no further than immediate gratification or discomfort. The wise man, the philosopher, is just the man who does not accept the present at its face value but measures it by some larger standard. The Cyrenaics, we may remember, closely as they tried to stick to the pleasure of the moment in constructing their ethics, had been forced to the same conclusion, and in aiming conduct at a balance of pleasure, they, too, had given away the case.

For a balance of pleasure is a moral principle, whether or not it be a satisfactory one, and to admit a moral principle of any sort makes all the difference. It is to recognize the authority of reflection over impulse, and the superior validity and reality of the counsels of reason to the reports of the senses. The possession of such a standard raises the individual above the stream of momentary caprice and solicitation and turns his life from a flight of scattered and quarrelsome desires and indulgences into a moral order, a career organized about an ideal. But a moral principle, whatever it may be, bears all the earmarks of the Platonic Form, so hated by the Sophists, Cynics, and Cyrenaics alike. It is discovered by using one's reason, not by listening to sensation. It is abstract and universal. It is something fixed, stable, and, as it were, eternal in the midst of the ebb and flow of passing pleasures and pains. Some of these it accepts and makes instances of the good, as any form recognizes and covers the new examples of itself hatched from instant to instant by experience. Others it drives away as alien, indifferent, doubtful, or evil. Standards may differ and change, of course, in what they permit or demand, but, whatever they may countenance, they are general rules, forms, ideals of conduct. They always mean that

behavior, whatever it is like, is no longer haphazard and sentimental, but is guided by a rational resolve. If they did not, they would not be standards.

Plato, then, in arguing that the good was a balance of pleasure, had, without moving off the Sophists' premises, simply driven piles through their quicksand, and found beneath it a sure bottom of Forms. Henceforth he had nothing to fear from their doubts. To have a right to a principle of some sort was all he required, and that by their own confession he had. Even if the one at hand proved only provisional and had to be discarded, it was sufficient to establish ethics on a firm foundation in the midst of the flux. He had taken the first step, and the one that costs, towards showing that conduct, like love, is a means of redeeming the soul from the flux and uniting her with the eternal. The rest of the way could be pursued in security and at leisure.

But the *Protagoras* takes more than the preliminary measures for finding in action and behavior the saving grace and the value of eternity which, as we have already seen, lurks in the flux of our affections. It also hints at what the final steps will be. When Socrates is converted to Protagoras' view that virtue can be taught, he is converted with a difference. He has drawn Protagoras to the verge of arguing that virtue can be taught because it is innate and latent in every man and only needs the stimulus of education to become explicit. In these circumstances Plato is only too glad to concede the Sophists' point. Virtue is not an artificial adjunct but a constitutional peculiarity of human life. It exists not by convention, but is an inborn propensity. Teaching it is not the grafting of something external and alien, but, to resort to the Socratic metaphor, a bringing to birth of something with which the mind is always pregnant. In a word, virtue is not the illegitimate progeny of a mind constrained against its inclination by the force of oppressive and artificial circumstance. It is a lawful offspring of the soul, the child of a love marriage, which Plato will presently describe, with a true and abiding good. It is to lead up to this point, and to inveigle Protagoras into almost admitting the legitimacy of virtue, that the discussion of its

teachableness is perhaps designed. In itself the question would be purely academic and of little importance.

What Plato hints in the *Protagoras*, he states openly and insistently in the *Meno*. Virtue is an inborn, not an acquired characteristic. The dialogue opens with the old query, can virtue be taught? to which, we may say at once, no conclusive answer is given. But it affords Socrates an opportunity to put the crucial question, what is virtue? For a time the argument moves over somewhat the same ground as that in the *Protagoras*. Virtue is not one thing in a man, another in a woman, still another in a child. Nor does it differ in freeman and slave. It is one and the same quality in them all, just as particular colors and shapes, however individual, are instances of color or shape in general. Eventually, after one or two tentative definitions, it is agreed that knowledge of what is good is the common quality. But how does the soul come by that knowledge? Obviously it is innate; witness the instinctive acquaintance with certain mathematical truths shown by uneducated persons who have never studied a word of geometry.

So far, so good. But the perplexity is by no means overcome. Granting that knowledge of the good is innate, how does it ever become ingrained in the soul? This is the crux of the difficulty. In dealing with it Plato states for the first time his famous doctrine of Recollection, upon which we touched in the chapter on Socrates.[7] There are stories, he says, in the poet Pindar and elsewhere of the soul's being immortal and passing from body to body. "Having then been born again many times, and having seen all things that are . . . she has knowledge of them all; and it is no wonder that she should be able to call to remembrance all that she ever knew about virtue, and about everything. . . . For all inquiry and all learning is but recollection." [8]

To illustrate the possession of these latent memories by high and low alike, Socrates now calls a slave boy of Meno's and by a skilful series of questions, in which no information is imparted, elicits from him a recognition of the truth of the Pythagorean problem. Here then is clear evidence. Although

[7] *Supra*, p. 75 ff. [8] 81. Adapted from Jowett's translation.

the boy has never been taught this truth, he possesses in latent form a knowledge of it, which has been awakened by Socrates' questions. It looks, then, as if he had come by it before birth in another existence and as if, generally speaking, the truth about all things had always existed in the soul.[9]

But virtue does not depend altogether upon knowledge. Right opinion is also a sufficient basis for right action. And instinctive correctness of moral judgment, like knowledge, is an inheritance from another world. But these two, true opinion and knowledge, are the only right guides to behavior. Virtue then is a divine gift. It is not acquired, for no one can implant it from the outside. On the other hand it cannot be called a natural endowment.[10] By this Plato apparently means that it is possessed, not by all living beings, but only by "souls," who have had a pre-natal, "supernatural" contact with the Good.

The *Meno*, we see, has carried us very far—much further indeed than we are prepared to be carried at the present stage of proceedings. The existence of a moral order, we are as good as told, is just one more proof of the existence of a world of eternal Forms beyond the world of phenomena, and we are ushered into their presence as we were at the end of our discussion of love and knowledge. But we are by no means at the end of our discussion of ethics. We are only just at the beginning. As Plato himself remarks at the close of the *Meno*, before asking how we came by virtue, we should do well to inquire again what it actually is.[11]

This inquiry Plato had been carrying on himself in the *Gorgias*, and we shall do well to turn back and see how he has fared. We may take up the tale where we dropped it in the *Protagoras*. There we had discovered that the good is certainly not the pleasure of the moment, but, perhaps, the greatest possible amount of pleasure in the long run. Now we are to find that a balance of pleasure will not work, and that quality must take the place of quantity as a deciding factor in determining the good.

The dialogue is staged at the house of Callicles, that ambi-

[9] 86 A–B. [10] 97–100. [11] 100 B.

tious and unscrupulous politician with whose Nietzschean philosophy of government we have already familiarized ourselves in the chapter on the Sophists. Gorgias and a young disciple, Polus, are for the moment his guests, and Socrates, together with Chaerophon, whom he runs across in the street, are invited in by him to see the great man exhibit his Sophistic tricks. The conversation, general at first, turns on the subject of rhetoric, which after some preliminary sparring is defined as the art of persuading lawcourts and assemblies about the just and the unjust.[12] To this Socrates objects that rhetoric is not really an art and does not presuppose in the teacher, or necessarily instill into the pupil, a true knowledge of justice and injustice. It is rather a kind of flattery appealing to the desire and caprice of the moment, heedless of what is best in the long run. It belongs in the same class as cookery and cosmetics and sophisms, which are poor substitutes for the genuine arts of medicine, gymnastic, and logic, and which give only a specious simulation of wholesomeness, health, and truth. Nay more, the power that one may attain by that sort of persuasion is not real power at all. For the only power worth having is the ability to benefit oneself, and the exercise of that ability requires knowledge and wisdom. In the hands of a fool power is only an instrument of self-stultification or even self-destruction. The mere possession of power, then, is no advantage; witness the portion of tyrants who so often use their power to promote their own wickedness.[13]

But, interposes Polus, we can be both wicked and happy. Who would not be a tyrant, if he had the chance? No, Socrates replies, it is better to suffer than to do injustice, and better, too, that the wrongdoer should be punished than go free. The disgrace, and therefore the evil, of doing is obviously greater than that of suffering, and the lesser of two evils is always to be preferred. Moreover, dishonor, injustice, and evil are diseases, as it were, of the soul, from which she can only recover if she is purged by punishment. Illness of the body, too, has often to be cured by harsh and unpleasant means. But the soul should no more be left untreated and un-

[12] 454 B. [13] 458 C–468 E.

cured than the body. Hence evil-doers, if they really had their own good at heart, would seek out the judge and demand punishment, just as the sick man goes to the doctor and asks for medicine.[14]

These passages are so at variance with the general trend of Greek ethics and so curiously Christian in tone as to have occasioned some comment. Glorification of suffering was not a dominant note in ancient thought, and it would not ordinarily have occurred to the Hellenic mind to do penance and court expiation merely for one's own private satisfaction. It must be remembered, however, that in the case of sacrilege and some major offenses against human beings, the necessity of atonement and purification was insisted on by the established religion. Moreover, poets like Aeschylus and Sophocles had come to feel that the suffering of the evil-doer, apart from the ceremonial or material amends he might make, would in itself serve to expiate his guilt and create within him a clean heart.[15] And the Orphic-Pythagorean movement can scarcely have failed to realize some of the more subjective and spiritual implications of its central doctrine of the fall and redemption of the soul.

Still, the doctrines propounded by Socrates were sufficiently paradoxical and startling and "Christian" to bring Callicles into the scrimmage. Hitherto he had been standing on the side lines, but now he could no longer restrain his amazement and contempt. All this, he cried, is nothing but "slave-morality," an attempt of the majority, which is composed of weaklings, to terrorize the strong and able minority and deprive them of their natural right to rule and do what they please with the inferior masses. With the political developments of this theory we have already dealt and will not repeat our discussion.[16] It is only Callicles' idea of the happy life led by the favored few that concerns us here. In the rightly developed man, he goes on, the passions will not be controlled but encouraged and satisfied, and this is virtue. To be always wanting and always gratifying one's wants is true happiness. Such a life may be, as

[14] 469 A–481 B.

[15] *Cf.* Fairbanks, *Greek Religion,* p. 343.

[16] *Cf. supra,* p. 37 ff.

Socrates says, like a leaky vessel which loses and wastes its contents as fast as it is replenished. But a sound and full vessel is stagnant. Pleasure depends upon a constant flowing in and out. The larger the holes, the larger the waste and the greater and quicker the replenishment. To be like a cormorant, forever hungering and eating, forever thirsting and drinking, is the ideal.

But, interposes Socrates, how about itching and scratching? Provided Callicles could have enough of them and could pass his whole life scratching, would that be his notion of happiness? In other words, must all desires and all gratifications, from whatever source derived, be regarded as equally conducive to happiness, provided only one can get enough of what one wants?[17] Callicles is offended at the vulgarity of Socrates' examples, and his offense gives the lie to the proposition that the good is the greatest amount of pleasure in the long run, just as Protagoras' recoil in somewhat similar circumstances, we may remember, gave away the case the Sophists had made out for the good being the pleasure of the moment. But Callicles is not let off as easily as was Protagoras. Plato holds him to the original proposition for a few more pages in order to demolish it by logic as well as by instinct, though it must be said the arguments employed do not ring loud or even altogether sound to the modern ear. How can pleasure and pain be equated with good and evil, Socrates asks, seeing that good and evil are opposites and therefore cannot co-exist in the same person at the same time, whereas pleasure and pain are often mingled and interdependent in the same sensation—as for example, that of quenching one's thirst—and appear and disappear together? Again the cowardly may experience as much or even more pleasure than the brave, and therefore, according to Callicles' reasoning, ought often to be accounted as good as or even better. The good, in a word, is something different from pleasure, as this final absurdity forces Callicles to admit. It is that for the sake of which all our actions are done, and with reference to which we distinguish those pleasures and pains that are beneficial from those that are harmful. For pleasure

[17] 481 C–494 E.

like everything else, "is to be sought for the sake of that which is good, and not that which is good for the sake of pleasure." [18]

The rather unconvincing character of these arguments, however, need not detain us. Callicles' recoil from Socrates' vulgarity is sufficient to betray the inadequacy of a mere balance of pleasure as a test for determining the good. But if the greater pleasurableness of a life is no guarantee of its virtue, where is such a guarantee to be found? Only, replies Socrates, by meditating upon the higher interests of the soul.[19] And such meditation, he goes on, shows that the claims made at the beginning of the dialogue are true—that rhetoric and the kindred pursuits flatter a love of pleasure rather than a love of the true good, and make no effort to improve and raise human nature; [20] that the tyrant, who has the power to do as he pleases but not the wisdom to see and pursue his best interests, will only end by corrupting himself and those about him; and that it is far better to suffer than to do evil, and better to be punished and corrected for what evil one has done than to escape retribution.[21] The truly wise and virtuous statesman, then, will try not to flatter and please the people but to guide them and make them better—which few statesmen, and even those accounted greatest, have done in the past.[22] Socrates, himself, will doubtless incur the hatred of the populace for his efforts, but he has faith in the justice of the Gods. After death, he has heard, the souls of the departed appear for judgment, and those of good men are despatched to the Islands of the Blest. But the souls of evil-doers must be cleansed of their misdeeds by purgatorial pains, and if they prove incurable, must suffer eternally as examples of the wages of sin. The good man, then, has nothing to fear in this life or the next.[23] So "let us take the argument as our guide, which has revealed to us that the best way of life is to practice justice and virtue in life and death." [24]

But the main question still hangs fire. It is all very well to say that virtue lies in knowledge of what is for the best interests

[18] 494 A–500 A.
[19] 501–506.
[20] 510–511.
[21] 509.
[22] 511–519.
[23] 521–527.
[24] 527 E.

of the soul, but what are those interests? So far all our results have been largely negative. We have learned what the good is not, not what it is. We have abandoned altogether the doctrine, implicit in the Sophist teaching and proclaimed from the house tops by Aristippus, that the good is the pleasure of the moment. Even the relatively moderate theory that it is the most pleasurable life as a whole—which we accepted provisionally at the end of the *Protagoras*—will not do. A whole lifetime of itching and scratching, however intensely and durably gratifying it may be, is somehow felt not to be so good as a less pleasurable but more "honorable" career. But why? Where shall we find a standard that justifies the distinction between honorable and dishonorable, "higher" and "lower," in cases where the balance of pleasure is equal, or that may even make less pleasure preferable to more? What is this further standard of right and wrong that seems to determine whether a pleasure shall be considered good or bad?

In the course of the argument, both in the *Protagoras* and the *Gorgias*, a name has already been suggested for this standard. We have begun insensibly and almost surreptitiously to talk about *justice* and *injustice* and to use them as measures for gauging the moral quality of pleasure and pain. Perhaps then, by inquiring into the nature of justice we may throw some light on our problem and forward our quest of the good. It is to such an investigation that Plato addresses himself in the *Republic*.

We may remark at once that the Greek word that we translate by "justice" has a very wide and extra-legal meaning. It covers and focuses the whole sphere of external moral action, and is indeed defined by Aristotle in its broadest sense as not "part of virtue but virtue entire," [25] or at least as "complete virtue as shown in relation to our neighbour." [26] And Plato, as we shall soon see, is willing to apply it also to the inner life and to a man's dealings with himself. We might, then, translate it simply as "morality," or, if the word had not turned distasteful from too much mouthing by a sour and crabbed ethics, as

[25] Eth. Nic., V, 1, 1130*a*, 9–10.
[26] Eth. Nic., *ibid.*, 1129*b*, 25 (Oxford trans.).

"righteousness." [27] But whatever term we choose for expressing its meaning, we are, in investigating its nature, asking ourselves what a man and what a society would be like if the Idea of the Good were operating effectively in human nature and conduct.

The scene of the *Republic* is laid at the Peiraeus in the house of Cephalus, a very wise, rich, and mellow old man, who, having outlived the pleasures of the senses and gladly escaped from the tyranny of the passions, has turned to the consolations of meditation and good talk. Among the other participants in the discussion we find, besides Socrates, Plato's two brothers, Glaucon and Adeimantus, and the Sophist Thrasymachus. The conversation begins in the old key of negation. The preliminary definitions of justice examined and discarded one by one in the first book have already been enumerated in the chapter on Socrates as examples of the dialectical method, and we may refresh our memory of them there.[28] We also may recall there,[29] and in the chapter on the Sophists,[30] the argument with which Thrasymachus makes a loud and violent irruption into the dialogue—that justice is simply the interest of the stronger, or, in other words, of the party who happens to be on top, and is therefore a wholly man-made, arbitrary, relative affair with no foundation or sanction in either nature or authoritative convention. It is to the refutation of this argument that the rest of the first book is devoted.

The first steps of this rebuttal were included in our description of the dialectical method,[31] but we will repeat them in order to follow more easily the further development of the argument. If justice be the interest of the governing class, what, Socrates asks, is the situation when the government mistakes its own interest and issues suicidal orders? Should the just man even then obey its edicts, when by his obedience he is contributing to the injury of his lawful rulers? Thrasymachus parries by remarking that the stronger, so far as they are really stronger, and the government, so far as it is a true government, are never

[27] This translation is suggested by Burnet, *Ethics of Aristotle,* ed. 1900, introduction to Bk. V.

[28] *Cf. supra,* p. 60.

[29] *Cf. supra,* p. 60.

[30] *Cf. supra,* p. 39.

[31] *Cf. supra,* p. 59.

mistaken as to their best interests, just as neither the arithmetician, the physician, nor any other "person of skill ever makes a mistake in so far as he is what his name implies." [32] So far as the artist errs, he is no artist. Very well, replies Socrates, you admit that government is an art. But what is the function and "interest" of an art and of an artist? The "interest" of medicine is the health and well-being of the patient, of the shepherd, the protection and care of his sheep. And the arts in general have no private or selfish end. Their whole essence, aim, and satisfaction lie in perfecting their subject matter. By analogy then, the true interest of the governing classes should be the welfare and happiness of the governed.[33]

At this point, Thrasymachus, aware that he has been trapped, loses his temper. Socrates, he cries out, is so childish that he should have a nurse to wipe his nose. He cannot even distinguish the shepherd from the sheep. Why does the shepherd tend and fatten his sheep, at any rate? Not for their good certainly, but for the profit that may be made from them. Furthermore, any fool can see that the unjust have a far better time of it than the just. The just man loses always by his honesty, whereas the unjust, particularly if he operates on a grand scale, gets what he wants and is happy. Happiest of all is the tyrant. All men envy him and would emulate him if they dared.[34]

Having, as Socrates remarks, deluged his audience like a bath-man, Thrasymachus would fain be gone. But he is detained by his hearers, who insist that he shall remain to defend his position, and he is at once taken to task by Socrates on the ground that he has confused the interest and intention of an art with the additional payment that the artist receives from society for work well done. So far as a man is a true artist and nothing else, he is wholly wrapped up and contented in what he is doing, but his fellow men contrive further rewards for him by honoring him and giving him money for his services. And in the case of the art of government, if he will not exercise his art and take the reins into his own hands, he is penalized by being ruled by his inferiors. The governors then, even if they assume office to avoid this penalty, are none the less interested, *qua*

[32] *Rep.* I, 340 D–E. [33] I, 341–342. [34] I, 343–344 C.

rulers pure and simple, in the welfare of the governed, just as the painter, *qua* artist, is no less oblivious of himself and wrapped up in his subject because he happens to sell his work afterwards. Indeed, in a city composed entirely of good men, far from any one's wishing to be a tyrant, every one would dodge the task of governing if he could, for it is much more trouble to look after other people than to be well cared for by somebody else, as the governed would be in a properly ordered state.[35]

Again, if government be an art, as Thrasymachus has admitted, it must, like all the other arts, have some sort of limiting, defining canon or principle that gives it form and restrains it from vagary and excess. No musician, for example, desires to go beyond the laws of music, nor do doctors try to compete with one another in circumventing the rules of hygiene. But this is exactly what the unjust man does. He tries to defy and break down every rule and law and get the better not only of the good man but of his fellow miscreants. He out-Herods Herod and is more unjust even than injustice. The just man on the other hand is like the good artist. He desires to excel in his line, to be better than the bad, but he does not strive to exceed the ideal, and get the better of goodness itself. The just man, then, turns out to be the good and wise man because of his conformity to the rules of his art. Lack of a rule, and excess and disorder such as the unjust man betrays, are signs of a poor artist, and, in the art of conduct, of an evil and ignorant man.[36]

Thrasymachus is now perspiring freely, the day being hot, and what is more, is blushing, but Socrates will not let him off. He has said that the unjust are stronger and happier than the just, and he must be made to recant these two points. In the first place, Socrates proceeds to point out, in an unjust state every man's hand is set against his neighbor. But strife and division breed weakness. Only where there is honor among thieves can a gang act together in a strong and formidable way. Moreover, the unjust man is not only at odds with his fellows but is at variance with himself for want of a unifying principle in his own life. Hence he is far more at the mercy of circumstances than the just man, who has a standard of action. From

[35] I, 344 C–347. [36] 349 B–350 D.

the point of view, then, both of the state and of the individual, injustice is really a source of weakness, justice of strength.[37]

As regards the question whether the unjust are happier than the just, we must ask what happiness is. Everything has an end or use for which it is particularly adapted. The eye, for example, has seeing for its function, the ear, hearing. And ear and eye have a special conformation or excellence, or, as we might say, "virtue," which enables them to fulfil their function and express their nature. Now, we have already admitted that the virtue of the soul is right behavior. And by the exercise of her proper virtue—that is, of justice—she will, like all other things, attain her proper end, which, after all, is to live happily. Injustice, then, is to the soul what a defect in vision would be to the eye. It keeps her from performing her function of living well and attaining happiness. Hence happiness goes hand in hand with justice, not with injustice.[38]

Plato has now logically refuted to his own satisfaction the Sophistic doctrine and that of Thrasymachus. But he is no nearer saying what justice really is, and even his negative victory is not overwhelming. For the doctrine of expediency and the habit of opportunism are too deeply rooted in human nature to be overturned by anything so light as logic, and they still continue to breed maxims, conventions, and practices in defiance of any abstract rebuttal. We might then suspect that, however fallacious their theory might be, the Sophists were very near hitting the nail on the head when it came to the actual practice of humanity. This suspicion Plato expresses at the beginning of the second book through his brothers Glaucon and Adeimantus, who represent certain attitudes about morality which are still fairly common. Thus Glaucon makes himself the spokesman of the popular opinion that justice is not a good in itself but a disagreeable though necessary means to attaining rewards and respectability. Injustice, he feels, would seem to be the natural state of man. All men in secret regard it as more pleasurable and profitable than justice, and would pursue it openly if they could do so with impunity. But they cannot, and, much as they may love to commit violence, they hate equally to

[37] I, 351 A–352 A. [38] I, 352 B–354.

suffer it. So they compromise and try to find a happy mean between suffering and committing, and this compromise is the real origin and essence of what we call justice. But if only we did not have to fear retaliation and could act with impunity, would it not be far better to be unjust, and rich, and fortunate, and happy, than just, and subjected to every suffering and indignity? [39]

These opinions, which are forerunners of the famous "social contract" theories of Hobbes and Rousseau in modern times, are immediately backed up by Adeimantus. The strongest point of all, he says, has been overlooked. It is not merely a question of pleasure and profit. The very moral quality and essence of justice and injustice—the praiseworthiness of the one and the blameworthiness of the other—would seem to the popular mind to be bound up with their consequences. Children are brought up to be good, not for the sake of being good, but because honesty is the best policy in this world and leads to a heavenly reward in the next. And in like manner they are frightened away from evil, not by being shown its intrinsic ugliness, but by stories of the hell-fire that awaits the wicked. Such teaching is pernicious in the extreme. The supernatural sanctions are easily enough undermined by skepticism, and the rewards and penalties of this world, apportioned as they are according to appearance rather than reality, put a premium upon hypocrisy. If morality is to be established upon a sane basis, it must be shown to be worth while in and for itself, quite apart from the question of earthly or heavenly reward and punishments. Will Socrates be so kind as to undertake the task? [40]

Obviously the time has come for a change of tactics. The untenable positions have now all been reduced, and we know with considerable certainty what justice is not. We must at last tackle directly the question of what it is. But this question plainly cannot be answered by analyzing human nature as it stands. We are too imperfect, too much creatures of ignorance and impulse and expediency, to get results in that way. We shall do far better to paint in fancy a picture of what a truly just man, if he existed, would be like. By considering

[39] II, 357–362 C. [40] II, 368 C–369 A.

and analyzing such an ideal portrait we may perhaps penetrate and reveal the secret. And this is the method that we find Plato following. In pursuing it, moreover, he suggests a device that might not have immediately occurred to us. All words, Socrates remarks to Glaucon and Adeimantus, are more easily and clearly read if they are writ large. And a short-sighted man who has seen the bigger letters will more quickly recognize them again when he comes upon them in the small. If, then, we wish to make out the nature of justice in the individual, we shall do well to magnify it first to political proportions and read its meaning in the constitution of society. To this end, we shall do well to picture in our minds the organization of a perfect state.[41] In our discussion of ethics, then, we must be prepared for an interlude of political theory.

II

The first strokes of the Platonic brush upon this new canvas sketch for us an idyllic, primitive society in which the elemental wants of life are frugally provided for by a division among the citizens of the simplest forms of agriculture and handicraft.[42] How far we are intended to take this picture seriously—whether Plato meant it as a historical description of the origin of the state, or as an allegorical analysis of it into its fundamental elements and functions, and again whether he is covertly poking fun at the Cynic craze for the simple life, or really wishes that he, too, might dwell in Arcady—is an open and disputed question.[43] In any case Socrates' audience refuse to consider it, and Glaucon, laughing at its lack of modern conveniences and comforts, asks him if he could not make better provision for even a city of pigs. Socrates retorts that Glaucon requires a picture, not only of a state, but of a luxurious one. But he displays no objection to modifying his portrait,[44] perhaps because Plato, whatever his own penchant for the simple life may have

41 II, 362 C–367 E.

42 II, 369 B–372 D.

43 *Cf.* Nettleship, *Lectures on the Republic of Plato,* p. 69 ff. Barker, *op. cit.,* p. 166. Gomperz, *op. cit.,* II, ch. V, 11, 6.

44 II, 372 E.

been, was forced to admit that the complications of civilization, if properly handled, were in themselves no obstacle to enacting the Good.

The more complicated state, however, will require two more classes of people. Not only will its economic organization be more diversified through new callings—actors, artists, poets, musicians, dancers, dressmakers, servants, tutors, wet-nurses, ladies' maids, barbers, confectioners, chefs, and what not[45]—but its natural growth and desire for new territory, not to speak of the temptation its wealth will offer to neighboring states, will necessitate a standing army, expert in the art of war, to extend and protect it. Some of these soldiers will show a special aptitude for command, and to those who unite with their military virtues of bravery and spirit a certain humaneness of outlook and philosophic love of knowledge and wisdom the guidance of the whole state should be entrusted.[46] The ideal state, in a word, will consist of three classes, the great mass of producers of all sorts, the soldiers, and the rulers or guardians.

This division of the state into three classes may have been suggested to Plato by the Pythagorean doctrine that mankind consists of three types, the lovers of wisdom, the lovers of honor, and the lovers of wealth—types to which his classes correspond.[47] But in his hands the original tripartite division becomes to all intents and purposes dualistic, for no very clear distinction is made between the military and the ruling classes. Both are set over against the masses, and are subjected to the same primary and secondary education and to the same peculiar discipline of life. Politically speaking, at least, we have really only two orders, the producing lower classes, the economic viscera of the state as it were, defended and directed from above by a comparatively small, sharply marked out aristocracy of combined brains and brawn.

It is the fortunes of the upper classes that absorb from now on all of Plato's attention, and it will help soften the boldness of many of his conclusions, if we keep it in mind that his

[45] II, 373 B–D.
[46] II, 373 D–376 C.
[47] *Cf.* Barker, *op. cit.*, pp. 49, 163.

arguments are meant to apply, not to the great body of the state, but only to a select group picked out to discharge a special function. This abrupt dismissal of the masses from further consideration may be wounding to the conceit of modern democracy, but Plato's point is clear and logical enough. The welfare of the masses will follow as a matter of course, if only the state be well governed and defended. But the capacity for governing is not wide-spread, and a full realization of this capacity is even more limited. Moreover, unless intelligence and enlightenment are united with a love of the state and a sense of civic responsibility, nothing but harm can result. Good government, then, is bound up with the preservation or emergence of a comparatively limited superior class fitted by nature to rule, who have had their inborn abilities thoroughly developed by a long and arduous drilling in the nature of everything that is best, and who have been imbued with a patriotic desire to realize the ideal in the body politic. Upon the vital necessity of such a class Plato cannot too strongly insist, and their breeding and training constitute for him the fundamental problem of political theory.

Curiously enough, however, his interest is concentrated on their education, and of the method by which they are to be brought into the world and kept in existence we get no single clear and concise account. We have to form our conjectures on this point from scattered and often somewhat contradictory passages. The general plan would seem to be one of selective breeding supplemented by a constant weeding out of the culls and an infusion of new blood from the best elements of the non-pedigreed stock. Provision is made for raising to a higher level the "nature's noblemen" who may happen to appear in the artisan class, and for degrading such scions of the aristocracy as prove unworthy of their high birth. Indeed, this transposition of ranks, which nature sometimes orders, will be one of the prime cares of the government.[48] But Plato has little faith in the power of nature to supply noblemen unaided. It takes as a rule more than one generation to make a gentleman, and his main reliance is on a process of careful breeding within the

[48] III, 415 A–C. *Cf.* Barker, *op. cit.*, p. 175.

ranks of the guardians themselves. Devices for preventing the degeneration of the ruling class—and he was really, and perhaps rightly, far more interested in forbidding the best than in encouraging the worst to become mediocre—occupied, as we shall see, a large part of his thought.

We now turn back to the subject that Plato had so greatly at heart, and upon which he lavished his attention—the proper education of the upper classes. He begins by accepting the established Athenian curriculum of his day and laying down as a primary schooling gymnastics, or the care and development of the body, and "music" in its wide Greek sense of the cultivation of the mind through the study of the great poets, some of whose compositions, to be properly appreciated, had to be sung to the accompaniment of a musical instrument. This "literary course not only taught taste, but, since the poets were the real religious teachers of Greece, it also taught religion and something of ethics. The whole curriculum (which lasted from the age of six to that of fourteen) would produce a versatile man, who could sing a lyric and accompany himself on the harp, could quote Homer and Hesiod *à propos*, and was physically as well as mentally developed." [49]

Plato, however, is far from accepting "music" as it is taught, and the criticism into which he immediately launches leads him rather far afield. But the *Republic* is a thing of wheels within wheels, and we need not be surprised at finding the parenthesis of political theory which was inserted into the discussion of ethics now interrupted in its turn by an incidental discussion of the nature and function of the fine arts. The transition, moreover, is as natural, as easy, and as seemingly unavoidable in the one case as it is in the other.

## III

For Plato thoroughly disapproved of the kind of literature that formed the basis of the current "musical" education. In the first place, it shocked his religious sense. The teaching of true religion played, he felt, a vital part in the bringing up of

[49] Barker, *op. cit.*, p. 183.

children. But as matters stood, the young were gathering from Homer and Hesiod and the other poets all sorts of unworthy ideas of the Gods—that they were a dishonest, licentious, violent, uproarious lot who dispensed good and evil alike to mankind with careless hand. In this life the wicked were depicted as often happy, and the good as miserable, evil as profitable, and righteousness as a losing game. And the gloomy and desolate pictures of the next world were calculated to terrify the stoutest and most virtuous heart. Death was always an occasion for frenzied and indiscriminate lamentation, and the souls of the departed were portrayed as mere witless, gibbering shades flitting about the gloomy house of Hades in the darkness beneath the earth.

Ideas like these had no business in a pure and reformed religion such as an ideal state should teach its young. It was no use pleading that they were mere allegories, for children were incapable of distinguishing the allegorical from the literal, and what they learned in youth was indelibly and unalterably impressed upon the mind. A clean sweep must be made of all these stories, canonical though they might be. The divine nature, in which there is no deceit, no trickery, no evil, neither any alteration or shadow of turning, must be represented as absolutely good and the author of good only, and death must be divested of its terrors by implanting a lively faith that the good man has nothing to fear from it. Nor should the poets be allowed to portray the just as miserable, even in this life, or the unjust as happy. To this end, it should be one of the first duties of the government of an ideal state to exercise a strict censorship of literature and of religious doctrine, and to see to it that the young hear and believe nothing that is not morally edifying and a model of virtuous thought.[50]

In the passages just reviewed Plato, it will be noted, is killing two birds with one stone. Not only is he apparently warping the vision and binding the hands of the artist in the interest of a puritanical morality, but he is also, like Xenophanes of old, advocating sweeping and drastic reforms in the content of religious belief. Xenophanes had merely uttered a philosophic

[50] II, 377 A–III, 392 C.

protest against current ideas and indicated what seemed to him a higher view of the divine nature. Plato, however, would have the state establish and enforce his protestantism and forcibly suppress any disagreement with it. In this proposition to have the rulers dictate what shall and shall not be believed and written of the Gods, we get a distinct foretaste of the theocratic flavor that makes itself so evident in later dialogues like the *Statesman* and the *Laws*.

To return, however, for the moment to the arts. It is not merely the subject matter of literature that displeases Plato. He criticizes the form as well. The dramatic form, wherever it appears, is bad, for it is indiscriminately imitative. The poet who introduces it into narration must frequently make himself the direct spokesman of evil, and is condemned, as it were, out of the mouths of his characters. And the playwright, in casting his actors for ridiculous and vulgar and even villainous parts, identifies both them and himself with their unworthy rôles. But in an ideal state, so far as imitation is allowed at all, it must be only of the good. Writer and player alike will be ashamed of portraying anything base. The run of dramatists, then, however subtle and pleasing their art, will have to be banished to some other city. Moreover, all epic poetry must be reduced to a simple narrative form, in which the poet speaks almost always in his own person, and certainly never in that of a low or evil character.[51]

Now a large part of Greek literature, as we have seen, was written to be recited or sung to the accompaniment of a musical instrument, and to the nature of this accompaniment Plato turns. The same state control and subordination of everything to strictly "moral" considerations must be applied here too. The plaintive Lydian harmonies, which imitate and arouse sorrow, and the soft Ionian melodies, which are a favorite accompaniment for drinking songs and the like, and tend to relax the soul, must be suppressed. Only strains in the sterner Dorian and Phrygian modes, which are suitable to cheer and steel the heart in the hour of adversity and to hold it to temperance and high thoughts in the interludes of peace and freedom of

[51] III, 392 D–398 C.

action, should be permitted. Newfangled, many stringed, curiously harmonized instruments and strange, complicated scales, and particularly the flute, which with its subtlety and flexibility is the root of all evil, must go, too. Only the old-fashioned lyre, with no modern improvements, the harp, and for the countryside the shepherd's pipe, are fit to make music in the perfect commonwealth. Rhythm also must be as carefully scrutinized and expurgated of anything that might arouse an unworthy mood.[52]

All the other arts, weaving, embroidery, painting, sculpture, architecture, and the like are to be censored by the state along the same lines. They must be guided by the principle of simplicity, and restricted to expressing the image of the good in their works. Only thus can the future rulers of the state grow up "in a land of health, amid fair sights and sounds, and receive the good in everything; and beauty and the influence of fair words shall flow into the eye and ear, like a health-giving breeze from a pure region, and insensibly draw the soul from the earliest years into likeness and sympathy with the beauty of reason." [53]

But Plato's quarrel with the arts goes far deeper than their lack of prudery. It is not merely that the artist finds beauty and dramatic power and interest in things of which the puritan disapproves. Even his depiction of the most innocent scenes and events has the taint of corruption. For his subject matter is the sensible world and his works are copies of particular objects. But what, in their turn, are the things with which he is concerned, except imitations and shadows of the real world of Forms and Ideas? Works of art, then, are merely copies of copies, thrice removed from truth and perfection. This is a point brought out at length in the tenth book of the *Republic* where Plato returns to the subject of the arts. Take, he says, a bed, for example. It is issued, so to speak, in triplicate. First there is the real thing, the Form or essence of beds in general,

[52] III, 398 D–400 E. Similar criticisms are made to-day of the development of modern music, *e.g.*, of the immoral harmonies of Wagner and Strauss, and the demoralizing influence of the saxophone and of jazz.

[53] III, 401 A–401 D.

made, as it were, by a divine carpenter and laid up in heaven. Then there is the material, particular bed made by a human carpenter, which is an incomplete and perishable copy of the divine original. And finally there is the painter's picture of the bed, which is a reproduction of the carpenter's imitation. Painting, then, is an imitation, not of things as they are but of things as they appear—of appearance, not of reality. Its versatility and variety, its power of illusion, its ability to do everything, come just from the fact that it lightly touches on a small part of things, and that part an image. Poets, painters, and their ilk, for all their conceit and reputation for wisdom and insight, are of all people the farthest removed from real existence and therefore the least conversant with it. At far greater advantage are practical, active men of affairs who, through making and using the objects that the artist only depicts, really learn something of their true functions and natures. The fact is that the imitative art is an inferior who marries an inferior and has inferior offspring. Not only painting, but poetry with its brood of emotionalism, false sentimentality, self-pity, unseemliness, and buffoonery, witnesses to this. If Homer had really been able to educate and improve mankind, he would never have been allowed to wander abroad singing his songs. He would have been carefully kept at home honored and beloved, or at least he would have been followed by a host of disciples everywhere he went. As it is, much as we may admire him and his art, he cannot be allowed to enter the ideal state, where hymns to the Gods and praises of famous men are the only poetry that ought to be admitted.[54]

This seeming emasculation of the arts is astonishing, all the more so as Plato himself was so great an artist. To saddle art, as he would appear to do, with a priggish, self-consciousness of service to the community, and to restrict its creative impulse to the production of moral tales for children, nursery pictures, and hymn tunes, is something that even those self-appointed guardians of public and private morals, our modern watch and ward societies, have not as yet attempted. And his theory of

[54] X, 595 A–607 A. Passages from Jowett's translation have been introduced without quotation.

art as an imitation of sensible objects, and therefore in the third remove from truth, challenges immediate criticism on the ground that he would appear to misunderstand most unaccountably the true inwardness of the artist's vision and the real significance of his work.

It is, I think, impossible to clear Plato entirely of these charges. Very likely we are dealing with a naked outcropping of that vein of puritanism which, as we have seen, comes now and then to the surface in his philosophy. Still, a closer scrutiny and a willingness to read between the lines may at least reveal extenuating circumstances and keep our final sentence from being altogether unsympathetic. So far as the attack on poetry is concerned, we must remember in the first place the part Greek poetry played in Greek religion. The poets drew as freely upon the divine life as upon human for their subject matter, and it was to them that people turned for instruction regarding the nature of the Gods and their ways both with one another and with man. Homer and Hesiod were the only written repository of Greek religious tradition, and indeed, had an almost scriptural authority. But the picture they gave preserved many primitive and monstrous stories, and even at its best could not but disappoint and distress any thoughtful and religious mind of Plato's day. Plato, then, could scarcely plead for a purer religion and a worthier idea of the divine nature without demanding a very considerable expurgation and bowdlerizing of poetry as it stood. We, to-day, are confronted with somewhat the same difficulty with respect to the Bible, many passages of which do little credit to the divinity or the moral standards of their supposed author. Where, however, Plato was for an immediate and drastic censorship, we, with our "higher criticism," our realization that the idea of God like all things human has evolved from humble beginnings, and, last but not least, our less quick, less intelligent and less impressionable public, are inclined, more sensibly perhaps, to put up with what is bad in our sacred books for the sake of the good.

Again, turning from the poet's representation of the divine to his portrayal of human life, we may discover reasons, if not justifications, for Plato's attitude. His complaint on this

score is apparently lodged mainly against certain contemporary writers, the loss of whose works, and even of whose names, leaves us without grounds for forming an independent opinion of their merits. Doubtless part of his criticism belongs to the perennial resentment aroused at all times in a certain type of character by any and every effort of art to develop new forms and embrace new subjects. And the same is probably true of his attack on music. We to-day are familiar enough with the wholesale and indiscriminate damning of all impressionism, post-impressionism, *vers libre*, skyscrapers, problem-plays, bedroom farces, Wagnerian and post-Wagnerian music, syncopated time, jazz rhythm, and the like, on the part of this or that "purist." Still, after making due allowance for Plato's temperamental pessimism and for the somewhat jaundiced eye through which we are consequently obliged to see such facts as he gives us, we may suspect a very real decline in taste at Athens and conclude, not only that the artistic and literary work of which he complains was second-rate, but that its innovations and "advances," like so many of the experiments with which we are being deluged at the present time, were infected with eccentricity and sensationalism.[55]

To our way of thinking, however, mere deterioration of taste scarcely warrants the severity of Plato's criticisms and the solemnity of his tone. Lapses from beauty bother us but little, even when we notice them, and generally those among us who worry the most over any lowering of moral standards are the least concerned at the absence of any aesthetic ones. Our righteous anger is poured out upon books and plays and pictures that are "immoral," not upon those that are inartistic. But Plato makes no accusation of suggestiveness in the narrow sense in which we take the word. The artists whom he denounces were probably of no artistic merit to be sure—purveyors of broad farce, melodrama, and sentimental slush—but to our eyes that sort of thing is innocent enough. Hence we cannot as yet quite understand what all the fuss is about.

Two considerations, however, will help make the situation clearer. In the first place, we must remember that the Hellenic

[55] *Cf.* Nettleship, *op. cit.*, pp. 105 ff.

mind allowed no division between moral and aesthetic standards. To it the beautiful and the good were one and inseparable, and their union, in which there was no "better half," was consecrated by a single, indissoluble phrase ever recurrent on the Greek tongue. The art of living well—or, in other words, morally—was the finest of all the fine arts. The good man was the man who played such a straight, accurate, pretty game of daily give and take with his fellows, that the exclamation "beautiful" was on the lips of all beholders. Sin, on the other hand, was primarily an eccentricity in thought and deed, a kind of "cubism" in conduct. The Greek word for it meant originally a flying wide and "missing of the mark." It arose from a failure to observe correctly the limits set to action by the situation and nature of mankind, and it implied a certain deficiency and clumsiness in the technique of good behavior, which resulted in a striking of the wrong note in the harmony of the social composition. In a word, all jarring like all pleasing of the moral sense rang with aesthetic overtones.

A thinker like Plato, not only feeling and observing but pondering this fusion of the aesthetic and the moral in the Greek temperament, might, then, well take alarm at a decadence of taste. He would not see in it, as we are only too ready to do, merely an ebbing of something outside the main currents of life, the diminution of which did not vitally or even noticeably lower the general level of civilization. He would rather consider it a dangerous sapping of the whole tone and stamina of Greek culture. In his eyes a people that was losing its aesthetic discrimination and sinking to the creation and enjoyment of second-rate stuff in the other arts must be already dangerously inclined to tolerate inferior standards and performances in the art of conduct. The blinding of the eye to beauty could not but infect and dim the fellow vision of moral goodness. Later, in the *Laws*, it was precisely to such a decline in taste that he attributed the political decline of the Athenian democracy.[56]

Perhaps Plato's feelings in the matter were all the stronger, and this brings us to our second point, because of the greater

[56] *Laws*, II, 658 E ff. *Cf.* Barker, *op. cit.*, p. 311.

susceptibility of his race to suggestion. To us with our coarser grain the emphasis he places upon the chameleon-like character of the growing mind and upon the importance of the artistic environment seems exaggerated. Vulgarity and ugliness, even when the meaning of the terms is understood, are not regarded as essentially prejudicial to good conduct. Nor do we find any great harm in the depiction of the grosser offenses against morality like murder, cruelty, robbery, scandal-mongering, and blackmail. And yet it is an open question whether the lack of taste and indifference to beauty of our proletariat have not been a very real hindrance to our attainment, as a people, of an enlightened moral outlook, and whether the constant deluging of the public with accounts of crime may not in itself be a great incentive to our more than average criminality. But if we would estimate the effect of art and literature upon the Hellenic character, we must multiply many times over their influence upon ours. The superior sensitiveness and the quicker intelligence of the Greeks had, like all virtues, a characteristic fault. In their case the outstanding weakness lay in a certain instability and lack of self-control and a tendency towards insincerity and mimicry.[57] Natural-born actors and artists, they loved to pose and be theatrical, and were instinctively inclined to make every part they saw played their own. They were, then, prone to a degree that we cannot easily understand to take on the colors and imitate the actions presented them by poet and playwright. As it is, we talk of the power of the press to mould and influence public opinion. This power, highly magnified and directed upon a much smaller, less unwieldy, and more inflammable mass, was in the hands of Greek literature.

It was a prime function of education, Plato felt, to correct the national vice of insincerity and indiscriminate mimicry and to inculcate straightforwardness and stability of character. Hence, with the arts playing so important a part in education and occupying the position they did in the life of the people, it was imperative, as he saw it, to put them under state control and subject them to censorship. Only thus could he be certain that they would present models the imitation of which would fix

[57] *Cf.* Nettleship, *op. cit.*, p. 106, Barker, *op. cit.*, p. 193.

the character in the mould he deemed necessary and make a man a trustworthy citizen of the ideal commonwealth.

Nor, after all, need this censorship wreak the havoc in art that we at first supposed. For there is a reverse side to the shield, and Plato, we may be sure, would have deemed it of the utmost importance to shelter the inhabitants of his Republic no less from inartistic treatment of the good than from artistic representations of the bad. Edifying subject matter would not have justified or excused in his eyes vulgarity and tastelessness in the form in which it was set forth. God must be pictured as good, but he must also be depicted and worshipped with splendor and with beauty. A moral purpose must inspire the vision of poet and painter, but their art must be none the less consummate. Were Plato to visit us to-day, he would deal as severely with the churches we are willing to build, the religious services we are content to hold, the hymns we enjoy singing, the sermons we praise, as with the tone of our newspapers and the subjects of our novels and plays. Moody and Sankey would be sent packing along with Homer and Hesiod. Many of our clergy, chiefly the most zealous and evangelical, would be politely invited to leave. For every theatre closed, some edifice built in all ugliness to the great glory of God would be razed to the ground. Prayer-meetings would be as rigorously suppressed as phallic orgies. And sex-novels, exhortations to Christian manhood, the tabloid press, and disquisitions on virtue would all burn on the same pile. In a word, if the Cavalier must adopt the moral standards of the Puritan, the Puritan must adopt the dress, the speech, the grace, the urbanity, the distinction of the Cavalier. Whatever, then, beauty might have lost in the Platonic commonwealth from too narrow a moral supervision, it would largely have regained from a no less strict aesthetic censorship of the expression of moral and religious sentiment.

We pass now to the philosophic core of Plato's criticism. Art copies sensible objects, and its representations are therefore thrice removed from truth and reality. These may well seem extraordinary words in the mouth of a great artist, but let us pause here, also, before we criticize too severely. It may be that Plato is not so much setting forth a positive theory of

art in general as still attacking the tendencies of his day, or at least that he is allowing his concern at the contemporary situation to obscure and embitter his judgment of the subject as a whole. Moreover, he is voicing a half truth about all artistic creation which may have been the whole truth about the particular art he is condemning. For the artist really is an imitator, if only we take the term broadly and deeply enough, and in part he must reproduce or imitate material objects. Not only must he work with a sensible medium of one sort or another—words, musical sounds, colors, shapes—but the occasion, if not the cause, of his creative activity is some suggestive and intriguing twist, actual or possible, in the flux of appearances, which strikes him as good "copy." And his mirroring or working up of his subject must be a fairly faithful image of appearance, else his creation will be far-fetched and inartistic. To accomplish this he must possess the eye or the ear, the taste, the technical knowledge, and the sleight of hand necessary to manipulate his material with fidelity and beauty, and he must have poise enough to keep the sureness and grace of his technique from running away with him into vagary and affectation. So far, then, there would seem to be something to what Plato says. After all, art is bound hand and foot to appearance and does reflect the sensible world.

Frequently, too, as was perhaps the case with those whom Plato is particularly criticizing, art accepts this bondage and glories in it. It may feel that its ideal lies in perfection of technique. To be a master of words, of paints, of the chisel, is enough for the artist. His problem is essentially a problem of form, of color, of design, and his genius is proved by his ability to solve it. To him, as to the thinker, all things are food, provided only they give him an opportunity to exercise and display his skill. A fishmonger's counter, a half-carved roast of beef with its garnishings, may furnish him with all the elements of as great an artistic triumph, strictly speaking, as a Madonna and Child or a Christ on the Cross. For whatever subject he chooses as a starting point or selects as an afterthought, his work is essentially a study in composition. He uses his model not as an aid to the expression of an idea, but his idea as an aid

to the dexterous manipulation of a model. His real interest is focussed on how rather than on what he shall paint. Our museums and libraries are full of beauty that moves on this level—of the music of words, of transcripts of life, of genre painting and sculpture, and even of *soi-disant* religious art. But art of this sort, however perfect, might seem doubly to conform to the Platonic definition. Not only does it spring from an attachment to the sensible world, but it asks only to complete a vicious circle and return to its starting point. It may rearrange and pose its material as it chooses, but the result is a copy that, in Plato's eyes, transcribes only the sensible features of the original and is no less part and parcel of the flux than they. Of the pure and eternal beauty that transcends sense it has no word and gives no inkling. There is nothing in it to raise the individual, as love and knowledge and right conduct raise him, out of the flux to contemplation of true being.

Still, even if the intention of art is merely to mirror the sensible world, as Plato seems to think, and even if the artist feels himself fulfilled in the technical perfection of his work, there is one point that Plato apparently overlooks. Regarded simply as an imitation of appearances, art is more than bald reflection, more than photography. It is inexact and selective. It touches up its subject and gives it back to us suffused with the humor, the grace, the dramatic appeal, the comic or the tragic note, detected by the artist's eye. The sensible object returns, but with a difference. It is now charged with the beauty of the artist's technique, and that beauty, however superficial, confers upon it a value that it did not possess, or that we did not so clearly see in it, until it was reflected through his mind. The clever handling, then, of a trite, or vulgar, or objectionable subject, by eliciting from it aesthetic values or even the power to amuse, redeems it in part from triviality and sordidness, and makes the copy really better than the original. The most convinced realist, if he be also a true artist, cannot help improving upon life, for his material will in every case be touched by the divine grace of his talent, and there will be at least always something to admire in his imitation even when there is nothing to admire in what he imitates. The artistry shown in his treat-

ment may, of course, be more than offset by objections based upon other than strictly aesthetic grounds, but the fact remains that his imitation will incorporate elements of the good that the sensible object fails to embody. In a word, we might argue against Plato that the artist's representation of the flux, however realistic, was less, not more, removed than the sensible world from the Ideas. Art of any sort we might say, so long as it was not sheer photography or eccentricity, was an approach towards the light, not a further regress into the shadows. No matter what it copied, its imitation, provided only it were beautiful and telling, would be a step away from appearance in the direction of the Platonic Reality.

This brings us to another, more important point, which Plato seems also to ignore, or at any rate to slur. The intention of the artist, at least of the great artist, is not satisfied by a mere imitation of the sensible world, however beautiful and technically perfect his copy may be. For him things have voices, are charged with meanings more beseeching even than their outward beauty. In reflecting the surface of phenomena he seeks at the same time to penetrate it, and to catch and interpret what lies hidden beneath. He feels by the instinct of his art that it is given to him to see more in things than is superficially apparent, and he is driven by his genius to struggle with his medium until he has expressed, so far as is in him and it, the "true inwardness" of his subject. Thus the great landscape painter, whether he use words or color, not only gives us the body of the natural scene in its native loveliness, but at the same time makes us feel all that muted, far-away music of overtone and allusion which we call its "spirit." So, too, great portrait painting impresses us not only with the appearance but with the character of the sitter. And the noblest religious art, in creating the outer semblance of a God or in depicting an episode in his story, also reveals to us something of what he has meant to human life. It is in this power to reach through the sense of beauty the whole life of the beholder and to touch and thrill it with this surcharge of meaning that the signal virtues of the artist—his sincerity, his insight, his tenderness, his profundity —consist. The possession of such power more than atones for

lack of technical facility, and no amount of craftsmanship can make up for its absence.

But now what is this true inwardness, this character, this spirit, that the artist is trying to seize and express? What is this meaning with which to his eye all things are pregnant and of which his hand is seeking to deliver them? What is this revelation that they are forever whispering in his ear, and that he is striving to make audible to all the world? Surely, it is what Plato meant by the Idea. It is that in a thing which experience instinctively turns towards and seeks, and to which it responds—the essence of the thing, its quality of eternity, somehow made manifest in the flesh, and fixed for all time by the poet or painter upon his canvas or his page, something deathless and universal in its appeal, nowhere out of fashion and never outgrown, unchanging in its power to enchant and to transport the soul. We might then take up the cudgels against Plato once again, maintaining not only that the touch of a perfect technique may bring the superficial copy of any item in the flux nearer than its original to the Idea, but also that the intention of all great art is to imitate, not the passing appearance, but the abiding reality behind it. Art, like love and science and simple goodness, is a vision and a grasp of the eternal in the temporal. Its work is not a copy of the sensible object but an elucidation and statement of the Idea embodied within it, so far as the Idea can be set forth in sensible terms. Not merely accidentally by its skill, but essentially by its aim, it raises out of the flux the appearances with which it deals, immortalizes them, and assimilates them to true being.

There remains as a final point to consider the first point upon which we touched—Plato's seeming desire to turn all artists into "uplifters" and to imbue them with a priggish sense of service to the community. Nothing of course could be more devastating to the love, the pursuit, and the creation of beauty. Art can flourish only in an atmosphere of freedom—freedom from the restrictions of convention, social responsibility, and petty moral censorship, freedom to go its own way, live its own life, dream its dreams, and make its experiments and innovations unhampered by the forces of standardization. Whether or not,

then, art for art's sake is a sound theory philosophically, it is the only theory on which a community can act if it is to produce and encourage civilization. Society must tolerate cheerfully the vices and eccentricities of the artistic temperament if it would foster its virtues and its creative genius. It must be willing to breed and bear with the small fry if it is to bring a great man to birth, and it must refrain from nagging the artist about good citizenship and his duty to improve his fellow men, unless it would strangle those virtues, that genius, and that greatness in the cradle, and deprive itself of the splendor these qualities might otherwise have shed upon it. In a word, the attitude of society must be one of leaving the artist at liberty so far as possible and benefiting indirectly by the best of what results.

Still, there is a sense in which Plato's attempt to turn art into conscious service of the community is justified. Paradoxically enough, although art for art's sake may be the theory on which society must proceed, it is not the theory on which art, or at least great art, acts. As a matter of fact and record, the supreme artist would seem always to have loved something besides his art—a friend, a woman, a city, an institution, a vision of life, a God—and consciously to have dedicated his work to the greater glory of this other thing. It is the lesser man who boasts that his art is his only mistress. Moreover, unless the artist would prove as narrow and as bigoted as the petty moralist he detests, he must confess that not only in practice but also in theory art is the service of something wider, more complete, and more final than itself. He may properly insist that conduct is not the whole, or even nine-tenths, of life, but he must as properly admit that the pursuit of beauty is likewise but a fraction of the sum total of good living. He is within his rights and contributes enormously to civilization when he shocks and defies the puritan, and his overstepping of the line drawn by the censor is frequently a timely rebuke to the claims of "morality" to be the sole arbiter of what is good and the sole dictator of how life should be lived. But, at the same time, he must work within limits prescribed in part by moral considerations. He cannot rebuke the whole of life and the total good for being

greater than his art, nor may he, any more than the puritan, shock and defy an ideal in which all human interests unfold themselves and come to flower. Man is not made in water-tight compartments, and too big a stone thrown into one corner of his nature may stir up waves that set his entire being aquiver with repulsion and protest. If the artist pushes his revolt against dictation from the puritan to the point of flouting the magnanimity, the wisdom, and the mellowness of this wider good and this larger morality, he makes his art as provincial, as one-sided, and as offensive, as the righteousness of his strait-laced detractor. Between those two unlovely berries moulded on one stem of irrationality and conceit—a thin-lipped puritanism and thick-lipped aestheticism—there is little to choose. In a word, a philosophy of art for art's sake is no more and no less tenable theoretically than a philosophy of virtue for virtue's sake. The one as little as the other can set itself up as an end to which all other activities must be subordinated. Art is a service, just as virtue is a service, and as every rationalized instinct and interest is a service, of the whole man, whose good, far from being centred upon any one of his functions or faculties, is focussed in an organization of them all.

When all is said and done, our final judgment upon Plato's dealing with the arts must depend upon what we consider his idea of the good to have been, and must share the uncertainty and suspense to which we shall find ourselves doomed on this point. If we must convict him of puritanism and of desiring to make of art a mere means of moral edification, then our attitude will be one of surprise and disappointment. If, on the other hand, we may attribute to him a more liberal idea of the good, much of our criticism will lose its sting. There will still be some point to it, to be sure, in that we may feel that Plato's disgust with the particular conditions of his day made him over-censorious and cast a blight upon his philosophy of art in general. But at the same time we shall be able to concede that his insistence upon art as service and his subordination of it to a greater good are fundamentally sound, in spite of the narrow and violent way they are stated. And here, in

suspense, we must leave the question, and return to our main theme, the education of the guardian class in the ideal state.

IV

Having disposed of music, or the elementary education of the mind, in the benefits of which, it may be remarked in passing, the lower class also would seem to share,[58] Plato turns his attention to gymnastic or the care and development of the body.[59] This will include not only exercise, but diet and hygiene generally, and the gist of his argument is that from childhood the future guardians should be kept in strict training. There must be no drunkenness and no women, and the diet must be calculated to produce, not the over-heavy body, slow habit, and easily upset constitution of the usual athlete, but a lean, wiry type inured to hardship and to changes of water and food and of heat and cold. To this end a simple, military, gymnastic, camp life on plain fare will be best. Physicians should be unnecessary. Every man should be able to doctor himself with simple remedies. If he has a disease that he cannot himself cure, or from which he will not naturally recover within a reasonable time, it is better for him and for the state that he should die quickly and easily, rather than be kept alive, a hopeless invalid, by all sorts of complicated and artificial means. This, of course, is a counsel of perfection. There will have to be doctors—men who have had a medical education, therefore know one disease from another, and are competent to deal with the body. In the same way, in spite of the fact that in an ideal state there should be no need for lawyers or litigation, there must be some judges to distinguish and weigh the relative gravity of the moral ills from which the soul suffers. But doctor and judge alike will minister only "to better natures, giving health both of body and soul, and those who are diseased in their bodies will be left to die, and the corrupt and incurable soul they will put an end to themselves." [60]

The combination of music and gymnastic thus administered,

[58] *Cf.* Barker, *op. cit.*, p. 211, note.
[59] III, 403 C *et seq.*
[60] III, 409 E–410 A.

will, Plato feels, produce the well-balanced and harmonious character indispensable in one who would rule the state. Without gymnastic to tone it down, music breeds softness and effeminacy, wastes away the spirit, and wears out the sinews of the soul. Without music to temper it, gymnastic makes a man hard and savage, all violence and fierceness like a wild beast, living in ignorance and evil conditions, with no sense of propriety and grace. The one, if left to itself, would turn out cowards, the other boors. Taken together, they develop both courage and temperance.

The youths educated under this system must be constantly watched and tested, with an eye to picking those worthy of eventually becoming rulers. While still young, they will form the soldiery or auxiliaries. But as time goes on, some among them will be especially distinguished for a love of country and a devotion to the public interest proof against both fear and the promise of pleasure. "And he who at every age, as boy and youth, and in mature life has come out of the trial victorious and pure, shall be appointed a ruler and a guardian of the state. . . . But he who fails, we must reject."[61] To put it in the form of a parable, all the citizens must regard themselves as children born full grown from the womb of mother earth, and as brothers formed of different metals, gold, silver, and iron, and apt, according to the temper of their particular alloy, for different things. The men of gold are naturally fitted to rule. In the hands of the brass and iron that make good farmers and craftsmen the state would be destroyed. Everybody is to be strictly judged by his metal and placed accordingly, even if it necessitate the degradation of the inferior son of a golden parent, or the raising of some peasant's child, born by chance with princely qualities, to an auxiliary's or a guardian's rank. Such a frank recognition of superiority or inferiority and of the part each man is fitted to play would, if it could only be inculcated, do much to assure social harmony and the welfare of the state.[62]

But when Plato speaks of the guardians and the soldiery as men of gold and silver, he is indeed speaking metaphorically.

[61] III, 413 E–414 A. [62] III, 414 C–415 D.

For the next point that he makes respecting their regimen is that they must be held to a life of poverty. There is always the danger that a ruling class, and a military class at that, may be tempted to establish a dictatorship and prey upon the masses, and this must be guarded against not only by education but by abolishing private property and the opportunities for self-aggrandizement it offers. The guardians must have no belongings of their own beyond what is absolutely necessary. They will have no private establishments, but will mess and live together like soldiers in a camp. And they will have no money except a small salary sufficient to meet their yearly expenses. Their gold and silver will be the divine metal of character. Material gold and silver in any capacity they will never touch.[63]

It is beside the point to argue that the ruling class will be poor and therefore miserable. In the first place happiness is not dependent upon money, and even if it were, we must remember that we are planning the happiness of the state as a whole, and that to that end we must perhaps sacrifice a disproportionate happiness in any one class. In any case no class should be made happy at the expense of a proper performance of its function in the body politic. If farmers were crowned with gold and dressed up like kings, and if potters passed their time carousing, with only an occasional twirl of their wheel, how long and how well could they stick to their specific jobs? And how much graver the question when the proper direction of the commonwealth is at stake! Some wealth, to be sure, must be allowed the masses, but not enough to unsettle them through money and indolence. On the other hand too great poverty, also, breeds discontent. It prevents a man from outfitting himself efficiently for his work, and from giving his sons and apprentices a good education in their trade. Hence it, too, is to be avoided.[64]

Again, the state must be kept within limits with respect to size as well as wealth. Its population and territory must not be allowed to outgrow and threaten its cohesion and unity. Plato does not here fix any definite limit—but it is interesting

[63] III, 416 D–417. [64] IV, 419 A–421 A.

to note that in the dialogue of his old age, the *Laws*, where he is giving his final and disillusioned opinion with regard to political constitution, he sets the most practical number at five thousand and forty.

It will be the mission of the governing class to limit both the size and the wealth of the state, with an eye to its best interest. They will, moreover, attend to levelling up and down the oncoming generation, degrading their own offspring if necessary, and elevating those children of the lower classes who are born naturally superior. Again, they will see to it that the system of education is never changed, for education lies at the basis of the state, and any innovation, however harmless it may seem, may well end by undermining the entire structure of the commonwealth. If only such innovation can be prevented, the habits of law and order inculcated by it will render further and more detailed legislation unnecessary. The citizens can be trusted to settle for themselves all matters of conduct and manners, and even of control of business, taxation, public safety, and the like. Indeed, so important a matter as the ordering of religion may be relegated in an ideal commonwealth to the seat of religious authority—the oracle at Delphi. But where innovation creeps in, and the habits inculcated by a sound and fixed education are upset, all these matters which ought to take care of themselves come to the fore and provide mischief for the restless hands and tongues of the demagogue and the reformer. These gentlemen, to be sure, profess a great respect for the constitution and propose death for any one who advocates changing it, but at the same time no one is readier than they to tamper with it indirectly and to circumvent its spirit through meddlesome legislation designed to effect their pet reforms. They believe that everybody and everything can be turned into just what they want them to be by the mere passing of a law, and they maintain themselves in public favor and get a reputation for statesmanship by treating the people like a garrulous and self-indulgent invalid and by prescribing an endless enactment of one quack remedy after another.[65]

[65] IV, 421 A–427 C.

The just state is now sufficiently advanced in construction for us to see in what its justice consists, and, having had his fling at the law-makers of his time—who look strangely familiar to us—Plato turns back from politics to morals and defines righteousness. But he is by this time so launched upon political discussion that he reverts to it almost immediately, to expatiate, in the fifth, sixth, and seventh books of the *Republic*, upon the rule of life and education of the governing classes. We shall, then, perhaps do well to see him through in his exposition of political theory before inquiring into the light it sheds on ethics. So far as the regimen of the guardians is concerned, we have, Plato tells us, to prepare for three most revolutionary ideas, or "waves," as he calls them. The first is the absolute equality of men and women in all things so far as the differences of character and strength imposed upon them by the distinction of sex permit. These differences are really very slight, witness the lower animals where nature has fair play. Women, to be sure, are as a rule somewhat inferior to men in strength and intelligence, but there is no such thing as "woman's sphere." There is no natural reason why a woman should not receive practically the same education in music, gymnastic, and even soldiering, as a man. Nothing can be urged against it except prejudice and convention.[66]

Such out-and-out advocacy of woman's rights and the equality of the sexes was, as we have seen, dead against conservative Athenian opinion and practice, which kept women in Oriental seclusion and allowed them no part in society or politics. Still, there were influences at work that might serve to break the full force of the innovation. The Athenian custom was not universally Hellenic, and, not so many miles away, at Sparta women shared to a large extent the life of the men and even exercised naked with them in the gymnasium. Again, in Athens itself there were advanced women who chafed at their restrictions. In Pericles' time the salon of Aspasia had been a rallying point not only for the liberals in philosophy and religion but for the more emancipated wives, and part of the disfavor in which she was held was due to the disturbing

[66] V, 451 C–457 B.

"feminism" her example and her hospitality excited in old-fashioned households. Indeed, the feminist movement had reached such proportions that it had provided "copy" for the poets. Two minor writers, Alexis and Amphis, had lampooned it, Aristophanes had paid it his compliments in the *Lysistrata* and the *Ecclesiazusae*, and Euripides had taken up the cudgels for women in the *Medea*. Socrates, too, had insisted on the essential similarity of the two sexes, and had dismissed feminine inferiority as a thing not of kind but of degree. The first wave, then, raised by Plato by no means rolled in from a serene and unruffled sea. There had been plenty of rumbling and agitation, and the atmosphere was already tense and threatening with the demand for equality.[67]

The second wave, however, came perhaps as more of a shock and a surprise. It was the proposal that the family should be abolished and that women and children should be held in common. This, Plato feels, is not unfeasible and has much to commend it. To begin with, if we are to keep the guardian class up to scratch we must apply to their breeding the same rules that govern the breeding of any prize stock. We must breed solely from the best, and among them from those only who are in their prime. Men should be allowed to beget between the ages of twenty-five and fifty-five, women to bear from twenty to forty. Plato, however, recognizes what so many modern moralists do not—that the exercise of the sexual instinct has besides its result of perpetuating the race the equally important consequence of enriching the individual life. He permits, then, intercourse beyond the age-limit—provided only a strict birth control be practiced and there be no offspring. Obviously a permanent association like that of the family is incompatible with these arrangements. There will be instead periodic pairing festivals at the discretion of the rulers, prompted by the needs of the state, at which individual unions will be determined by lot. The dice, however, will be loaded cleverly, so as to ensure that the best and bravest men draw the finest and fairest women. The children resulting from these passing associations will be taken from their mothers at birth and removed

[67] *Cf.* Barker, *op. cit.*, pp. 76, 217.

to a state nursery. The offspring of the inferior unions and any deformed infants that may result from the others will be quietly put out of the way. The rest will be brought up by the state and will not know who their fathers and mothers are. In these circumstances, to be sure, it will be difficult to prevent incest. The best we can do is to call all the offspring of any given festival brothers and sisters, forbid their union with one another and with their possible parents, and let it go at that. When sanctioned by the Delphic Oracle, however, the union of brothers and sisters will be allowed.[68]

Plato's audience, however, was to some degree prepared for this wave also by the structure of their society and their particular scale of values, and it cannot have seemed nearly so startling to them as it does to us. Family life was at a minimum, a wife was little more than a household drudge and a necessary instrument of procreation, and the enrichment of life through affection and love came to the Greek almost entirely from his relations with men. Since, then, the springs of his spiritual experience lay largely outside of the "home," the abolition of the family as an institution would have been much less upsetting to his life and less destructive to his finer sensibilities than it would be to ours. The idea, too, was not wholly novel. In Sparta not only were women on a footing of comparative equality with men but the institution of marriage was wholly subordinated to the welfare of the community, and "wives might be lent by their husbands to produce children for the service of the State." [69] Again, at Athens itself the Cynics were openly preaching and trying to practice promiscuity, much more to the amusement, apparently, than to the scandal of their neighbors. And one had only to consult one's Herodotus to learn that among the barbarians, tribes like the Agathyrsians, who lived the simple, natural, Arcadian life so highly approved by Plato, "have their women in common, that they may be brothers to one another." [70]

It is precisely to attain this same idyllic end of universal

[68] V, 457 C–461 E.

[69] Barker, *op. cit.*, p. 218.

[70] Herodotus, IV, 104, quoted by Barker, *op. cit.*, p. 217.

brotherhood that Plato advocates his communism. The family, like property, opposes a strong private interest to the public weal, and breeds selfishness and discord in the body politic. Abolish it, and the guardians and auxiliaries become one great family of brothers and sisters bound together by an all-inclusive tie of kinship and actuated by a single set of feelings, standards, and loyalties, shared in common. With the disappearance of private interest, disputes and litigation and crimes of personal violence will also cease. From earliest infancy children will be brought up to share the life of their elders. They will be even taken on military campaigns, though kept at a safe distance from actual battle, and this observation of war will stand them in good stead later on.[71]

The juxtaposition of the ideas of war and brotherhood prompts Plato to make at this point some interesting remarks upon pan-Hellenic unity and the rules that should prevail in a case of a clash between purely Greek states. He feels the isolation of Greece in the midst of a non-Greek world, and has a prophetic sense that one day it may fall under barbarian yoke. In these circumstances the fraternal ideal ought to be extended to all Hellenes. The citizens of an ideal Greek commonwealth will be "lovers of Hellas and think of Hellas as their own land." [72] Greek cities will regard their wars as passing family quarrels. They shall not enslave one another's citizens or devastate one another's territories, nor shall they burn houses and put the population to the sword. Those fallen in battle shall not be despoiled of their arms, nor shall captured arms be offered in temples and displayed as trophies. For it behooves Hellenes to go to war only with barbarians, and even with them the same rules of warfare should hold as already obtain at present among the Greek states.[73]

We are now ready to confront the third and greatest wave, which is about to break upon us. "Until philosophers are kings, or the kings and princes of this world have the spirit and power of philosophy and political greatness and wisdom meet in one, and those commoner natures who pursue either to the exclusion of the other are compelled to stand aside, cities will

[71] V, 462–467. [72] V, 470. [73] V, 468–471 C.

never have rest from their evils—no, nor the human race, as I believe,—and then only will this our State have a possibility of life and behold the light of day." [74] In other words, a thorough training in philosophy must be prescribed by the ideal state as the core and crown of the education of its rulers. Plato is prepared for a chorus of incredulity and dissent, which we too, are perhaps inclined to swell. To us, as to the Greek audience, the philosopher appears the most absent-minded, unpractical, and unbusinesslike of men, and the last to be entrusted with the difficulties and responsibilities of a job like governing. Plato, however, does not flinch. The philosopher, he retorts, is essentially a lover of the truth. He is not an amateur of sights and sounds or a flirter with ill-considered and half-baked theories and opinions, but a mind intent on piercing every sham and show and on getting down to bed-rock. It is the philosopher, then, who makes it his profession to know things as they really are, and who therefore is really best fitted to rule, for all legislation that does not spring from a knowledge of the truth about things is fundamentally shaky and unsound.[75] The government of the ideal state is no place for the wild theories, "isms," reforms, and political panaceas hatched out by mere impulse and opinion.

In the present state of affairs it is true that where political and moral standards are set by the blind prejudices of that great beast, the people, and where the arts of government and good conduct consist in humoring its whims and averting its furies, the philosopher must appear either a fool or a knave.[76] He is in the position of an expert navigator who finds himself on a ship nominally commanded by a dull, infirm captain, but really at the mercy of an ignorant, mutinous crew, each one of whom considers himself quite capable of steering the vessel into port. Naturally a crowd like that do not believe there is any such thing as a science of navigation, and think the expert himself a useless, prating star-gazer. And, as naturally, the navigator is not going to beg the crew to be commanded by him, nor the philosopher to entreat the world to listen to the

[74] V, 473 C–D. [75] V, 474 C ff. [76] VI, 493 A–C.

truth. He sets the truth before mankind, but it is for them to take it or leave it as they choose.[77]

It is also a fact that philosophers themselves may go to the bad. But this is natural enough. Their characters, being finer, are all the more easily corrupted by the temptations of the world, or by the necessity of associating with the vulgar herd and bowing to popular prejudice and opinion. And, of course, the greater the intellect that is misused, the greater the resultant criminal. Then, too, philosophy is often courted by inferior men, and the offspring is a breed of sophists and the like, running noisily underfoot. It is mostly these superficial busybodies that arouse by their wordy, mechanical imitations of philosophy a popular prejudice against the real article.[78]

Small wonder that in such a world the true philosopher, instead of coming to the fore as he ought and guiding the state, is only too glad to withdraw into obscurity. "He is like one, who in the storm of dust and sleet which the driving wind hurries along retires under the shelter of a wall; and seeing the rest of mankind full of wickedness, he is content, if only he can live his own life and be pure from evil and unrighteousness, and depart in peace and good-will, with bright hopes." [79] Still, this prejudice may in time be overcome by the example and precept of the true philosopher—so the hope that the state may be eventually governed by philosopher-kings is not perhaps altogether vain and impracticable.[80]

To help absorb the shock of this proposal both to ourselves and to the Greek there is one point to be kept in mind. For the Greek the term philosophy had become associated with delvings into the nature of the world-stuff, the results of which made not the slightest difference to every-day life. Whether the world was really made of water, fire, or atoms, or was given an initial shove by mind, or spontaneously whirled into shape, or ran mechanically by its own weight, were speculations devoid of practical application and particularly irrelevant to the problems of human conduct and happiness. So, too, in our

[77] VI, 488 D.
[78] VI, 491–496.
[79] VI, 496 D.
[80] V, 473 D–VI, 502 C.

eyes the proverbial absent-mindedness and remoteness from real life of the philosopher are due largely to the abstract character and remoteness from real life of his subject matter. The "absolutes" proposed by many modern thinkers elude and even contradict every-day experience at every turn. The way to them is so long, so devious, and so difficult, that when we reach them we have frequently lost sight of our starting-point and find it difficult to get back from them to the world about which they are supposed to tell the real truth. But the Platonic Ideas are quite different from the traditional Greek world-stuffs and the modern Absolutes. They are something that the whole flux of appearance, including every act of human life, is continually putting into practice and exemplifying. They do not play hide and seek with experience. They are immediately revealed in it and relevant to it, as the forms and laws and values by which it is organized into a world. Appearance may obscure and distort them, to be sure, but it does not lie about them. So far as it says anything coherent at all, it is telling us what they really are. They are current on the surface of the flux, not concealed in its supposed depths.

Indeed, as we shall soon see, the obviousness of the Ideas and their direct applicability to life have led some critics to maintain that their status for Plato was not that of "metaphysical" entities, but of what we to-day should rather call scientific concepts. In that case, the philosopher, as Plato conceived him, would be more like our modern scientist than our modern metaphysician. To be sure, our scientists are forced to limit their inquiries and meditation to a single, sharply defined sector of the universe, whereas the Platonic philosopher was to take an all-embracing view of the whole world and make himself a spectator of all time and existence. Still, the spirit, the quality, and the status of the results would be in both cases the same.

Moreover, Plato is not content to let his philosopher be even a pure scientist. In raising up his "third wave" he warns us no less strongly against putting knowledge without practical ability at the head of affairs than practical ability without enlightenment. The philosopher whom he proposes as king

is a man of affairs. Government is an applied science, and the ruler must know how to put into practice the truths that the study of philosophy and science has taught him. Very soon we shall find Plato attempting to ensure this union of theory and practice by insisting that the philosopher shall interrupt his study of dialectic with a long period of practical experience in office-holding as part of his distinctive training, and that thereafter his contemplation of the Ideas in the upper world shall be broken from time to time, as his turn comes, by a descent into the "cave" of every-day life, there to apply what he has learned, "toiling at politics and ruling for the public good." [81]

All in all, then, we might not be far wrong in considering the proposal that kings shall be philosophers, and philosophers kings, simply a plea for "scientific management" of the state. Legislators should be men of trained impartiality and justice of vision, versed in the spectacle of all time and existence, and honest and courageous enough to withstand the forces of ignorance and prejudice, and of private, class, and party interests, and to govern in the light of truth for the good of the whole body politic. In the same way, we might feel that Plato's defense of the philosopher against the contempt and mockery of the world is an attempt to justify, not so much metaphysics in the eyes of the man in the street, as the scientific point of view in the face of the credulity and obscurantism of the mass of mankind. If this be true, the third wave, far from overwhelming us, is one that we do not have to breast, but on the crest of which such of us as are enlightened habitually swim. Our great cry, also, is for scientific knowledge and management and for experts as kings, not only in the sphere of government but in every department of moral and social life —or, if that be an ideal laid up in heaven, at least, for common honesty and horse-sense and the nerve to look facts in the face, not askew or askance. And we are only too familiar with the derision, the obloquy, and even the downright attempts at forcible suppression, with which the expression of any enlightened and scientific opinion running counter to the prejudices

[81] VII, 540 B.

of the crowd is greeted by the crew of superstitions, bigotries, political nostrums, and moral and social fads and panaceas that carouse on the poop and quarrel for the helm of some modern ships of state.

Having thus pressed and proved to his own satisfaction the necessity of making the ruling class a race of philosopher-kings, Plato goes on to the programme of higher education specially designed to attain this end. With its gist we are already familiar. It seems to have inspired, we may remember, the curriculum of the Academy, and we outlined it when discussing the course of studies through which Plato put his pupils.[82] The first subject to be taken up after music and gymnastics was arithmetic, which had a double use. In its applied aspect it made for clearness and accuracy of thought, and was also indispensable in the military art. Moreover, it was the beginning of wisdom in that it taught one to distinguish between the visible and the intelligible and to take the first steps in abstract thinking, "compelling the soul to reason about abstract numbers and rebelling," as it did, "against the introduction of visible or tangible objects into the argument." [83] Arithmetic, however, only cleared the ground and sharpened the mind for the more profound subject of geometry, which incidentally, in Plato's day, was almost entirely bi-dimensional and confined to the study of plane surfaces. Geometry, too, was of great practical use, and highly necessary in war, but its chief value lay in the fact that it acquainted the mind with the distinction between the perishable and the eternal and fixed the attention upon imperishable and changeless truths. But Plato was not content with plane geometry. A beginning was being made with the problems of solid geometry, though investigations and teachers of the subject were few and far between. With the difficulties of this new science as well as with the principles of astronomy, or of solids in motion, the would-be philosopher-king must next be disciplined. Astronomy not only had its applications in the study of weather-conditions and the art of navigation, but no more fit symbol of the world of Ideas could be devised than the vision of the starry heaven, "the

[82] *Cf. supra,* pp. 168 ff.

[83] VII, 525–D.

fairest and most perfect of visible things." No one gazing upon it could help being led to meditate upon the eternal and undeviating laws that govern its movements, and upon such abstractions as absolute swiftness and absolute slowness, which are visible only to the eye of reason.[84] Finally, astronomy must be accompanied by its twin, harmonics, which did the same service for the ear by investigating the problems and discovering the eternal laws and natures that have to do with the harmonious motions of sound.[85]

But all these subjects, if studied separately and without reference to one another, were profitless. A means must be found for correlating them, connecting their results, and organizing all knowledge and all truth into a single all-comprehensive, intelligible scheme or Form. This means is philosophy or dialectic. Dialectic is the crown and queen of all the sciences. She alone has the "power of elevating the highest principle in the soul to that which is best in existence," and is the only science that "goes directly to the first principle, and does away with hypotheses in order to make her ground secure; the eye of the soul, which is literally buried in an outlandish slough, is by her gentle aid lifted upwards; and she uses, as handmaids and helpers in the work of conversion, the sciences which we have just been discussing." [86]

The attainment, however, of so lofty, so piercing, and so universal a vision as that of the one absolute Reality will call not only for arduous training but for natural qualities of the highest order. The philosopher-king must have, in addition to all the moral virtues, "keenness and ready powers of acquisition," strength of body and mind, indefatigable industry, and an enormous respect for and love of the unvarnished truth. Naturally, such a character and such knowledge will be long in the building, and must be developed storey by storey from the ground up. The study of the preparatory, mathematical sciences should be begun in early childhood, and by twenty years of age the grasp of their essential principles should be so firm as to permit a beginning of the dialectical task of correla-

[84] VII, 527 D–530 D.
[85] VII, 530 D–531 C.
[86] VII, 531 C–533 E.

tion. At the end of another ten years, those combining the best characters with the greatest capacity for philosophic vision should have been well sifted out, and the most promising men may now be put through a five year course in pure philosophy. Great care, however, must be taken at this stage that their preoccupation with dialectics does not breed a love of tearing everything to pieces and of arguing for the sake of argument. By the time they are thirty-five the chosen band will be of an age when they may suitably put their attainments to practical use. They will go back to the world, hold office, get experience, and show whether they are proof against the demoralizing influences of every-day life. This period will continue for fifteen years. Eventually, when they are fifty, those who have stood the test will retire to final contemplation of the truth and the absolute good; "for that is the pattern according to which they are to order the state, and the lives of individuals, and the remainder of their own lives also." But even in this stage, we may remember, they are to return frequently to the helm of state and rule for the welfare of their people. And, Plato concludes, "when they have brought up in each generation others like themselves and left them in their place to be governors of the state, then they will depart to the Islands of the Blest and dwell there; and the city will give them public memorials and sacrifices, and honor them, if the Pythian oracle consent, as demigods, but if not, as in any case blessed and divine." [87]

If our investigation of the Academy had not prepared us for the course of studies laid down for would-be rulers, the curriculum would strike us at first sight as fantastic. To the modern eye, accustomed to the blinkers of specialization, studies like arithmetic, geometry, astronomy, harmonics, and dialectic seem to have little bearing upon efficiency in kingship. Concentration upon subjects such as political economy, government, constitutional law, and the like would seem more to the point, and would be provided at once by the "educator" of to-day. We are, however, familiar with some of the influences that inspired Plato's schedule, and we know what his reply

[87] VII, 536 D–540 C.

would be.[88] His guardian class were going to pick up plenty of political science willy-nilly, the moment they were turned loose from their five years of dialectic and set to the practical task of governing. Why then waste time in acquiring an academic book knowledge, much of which might prove inapplicable and have to be unlearned? Moreover, even were this not so, the really important thing in training a man to be fit to rule lay not so much in imparting the specialized information connected with his business as in developing within him a certain capacity for grasping and digesting information in general, and extracting from it what was essential. No matter how much particular knowledge he might have, it would be worse than useless unless he were also a man of an accurate, impartial, and unprejudiced habit of thought, accustomed to view experience "under the aspect of eternity" and to infer from it a just and enlightened vision of human well-being and happiness. Without this elevation of point of view in the legislator, legislation, however professional, was bound to be short-sighted, unscientific, and swayed by private interest and partisanship, or even to be out and out cranky, fanatical, and silly. The prime, then, indeed the only problem in educating a man to rule was to raise his mind to the necessary heights and give it a detached and truly kingly survey of man and of the world. If this could be accomplished, special information as to the details of government could be left to be picked up along the way. In modern times the British, acting on this theory, trained their ruling class to discharge the political obligations to which its birth and position engaged it by drilling it in Greek and Latin—and by so doing turned out the finest and the most statesmanlike "guardians" of our day. But Plato, as we once noted, had no "classics" to turn to, which might exercise the mind with difficulties of grammar and translation and at the same time, by holding the glass of a finished past to the blurred and half-formed present, might give focus and perspective to a vision and understanding of the world. Mathematics and dialectic, however, filled the bill for him. Their problems afforded a veritable gymnasium for developing

[88] *Cf. supra,* pp. 164 ff.

power and accuracy of thought. The austerity and abstraction of their concepts, lifted high above the fret and hurry of the flux, were calculated to purge the mind of all meanness, prejudice, and intolerance. They taught one to reflect impersonally and calmly, to go straight to the heart of the matter, and to distinguish the essence from the accident, the changeless and the universal from the relative and the temporary—a habit without which mere information, however bulky, about constitutions and governments would only help darken counsel and kindle illusion. And without the last, dialectical effort of weaving together into one coherent pattern all these immutable values and laws and types, precipitated and isolated from phenomena by the various sciences, how could the mind review sufficient evidence with sufficient poise to estimate justly the true nature of the good and to legislate dispassionately and ruthlessly in its light?

It is, of course, a commonplace that Plato's theory of the state is communistic. But the opinion, if it is based, as it commonly is, upon his advocacy of doing away with the family and with private property, is insecurely founded. Communism is prescribed only for the comparatively small guardian and auxiliary class, while the great majority of the commonwealth are permitted to retain the old domestic, "capitalistic" régime intact, with apparently no interference save for a ban upon too great accumulation of private wealth in the hands of any one individual. And even the prescription of communism for the rulers is a matter of expediency rather than of principle. It happens to be, Plato feels, the kind of life best calculated to breed and foster an efficient governing class, but it is not necessarily the best life for the governed. In short, there is nothing sacred or universal about it. To call, then, the Platonic republic communistic as a whole for including a small, ruling minority subjected to a communistic régime, would be like calling an entire state monastic if it happened to be run by some religious order vowed to celibacy and poverty within its own ranks.

For all that, the Platonic state is socialistic through and through. But its real socialism is not a matter of outward

form but of inward spirit. It lies in the relation that every individual bears to the commonwealth irrespective of class or rule of life. Private property, the family, the ordinary vocations and avocations—all the external structure, that is, of an individualistic, capitalistic régime—may be allowed the lower classes, but no one, however humble, may call his soul his own, or have a private life that the state may not regulate. All the reality and value the individual possesses comes to him from sharing in the state. All that is worth while and of any account in him is exhausted and summed up when we call him a citizen, for he is essentially a mere instance and enactment of the life of his city, and his true and proper happiness and self-realization lie solely in contributing directly to its welfare. Anything in him that his political function and relation could not absorb and express would be accidental and unimportant, an obscuring rather than a showing forth of his essence. That the individual might have real and possibly supreme values in and for himself, which could not be directly socialized and turned to state purposes, was unthinkable.

This denial of the right to individuality and of the value of private life was logical enough. Indeed, Plato could not consistently take any other stand. He was bound to apply to the sphere of human activity his doctrine that the individual object gets whatever being, and worth, and name it possesses from the Type and Form of which it is an instance, and to develop the political and social implications of the reality of the universal and the comparative nonentity of the particular. Moreover, there was one state in Greece whose organization was not so far from his ideal, and the way it worked was calculated to confirm in his eyes the superiority of the constitution he proposed. There were sound reasons for admiring Sparta, quite apart from the fact that her scheme of government at its best fell but one remove short of the perfect commonwealth. Her communistic system with its utter subjection of the individual to the state and its complete invasion of his privacy still bred, in spite of the growing infection of plutocracy, a race of blood and iron, frugal, hardy, courageous, orderly, and blindly devoted to the fatherland. And after the

War the strength and advantage of these qualities stood out triumphantly, in signal contrast to the disorder, the softness, and the disruptive individualism of the Athenian democracy, which not only had wrecked the Empire by its folly and incompetence, but apparently had learned little or nothing from the lesson.

The bitterer fruits borne by this simple and rugged stock—its hardness, its brutality, its disparagement of culture and indifference to enlightenment—might well seem insignificant or accidental beside those of victory. No wonder, then, that Plato, seeing the efficiency and the real virtues of the Spartan system, and unmindful of its deadening effect upon the higher reaches and finer accomplishments of the spirit, felt that although the ideal commonwealth was laid up in heaven, the next best sort of constitution was giving a good account of itself on earth.

As time went on, we shall see, Plato became less visionary and more practical. The Academy was primarily a School of Political Administration and had to face facts that theories would not always fit, so it will not surprise us to find him slowly coming down to earth, and eventually summing up the results of his gradual disillusionment in the *Laws*, his last work, where he abandons the ideal and discusses the form of government best adapted in his opinion to existing conditions. Moreover, the *Republic* itself was launched upon a sea of troubles. Rival political theories were already in the field to challenge his conclusions—and to be challenged by them. The doctrines of Thrasymachus and Callicles were still fresh in men's minds, and while Plato was holding forth at the Academy the Cynics were running about town, not only attacking the reality of the Ideas, but drawing from their own "nominalism" an individualistic theory of society and the state that bordered on anarchism. The Cyrenaics had their brand of nominalism, too, which was openly more destructive, and their obviously bored though well-bred tolerance of the state carried a subtle poison more deadly than the earnest negations of Antisthenes and his followers.

The controversy in which we find Plato and his old Socratic

schoolmates engaged is hydra-headed and everlasting. We to-day still bitterly debate whether the state is the creature of the individual or the individual of the state. We affirm or deny, if need be with force or riot, the right of the government to invade the home and regulate the private life of the particular citizen in the name of the public good. We fight shoulder to shoulder with the forces that make for standardization, or we resent them with all our heart and soul and strength. But to the philosophic eye we are, when all is said and done, merely wrangling without knowing it over the Platonic doctrine that the particular has being and value only in so far as it realizes a type and conforms to a universal. Indeed, when the tumult and the shouting of the World War has died away, it may appear to the historian of the future that the conflict was in its most important features a phase of the old realistic-nominalistic controversy, and that the real issue at stake was not so much the life or the death of nations as whether individualism and all it stands for should survive or the Platonic political realism be imposed by force upon the world. For the Prussian view of the relations of the individual to the state was at heart Platonic and Spartan, and the Fatherland exhibited many of the virtues and vices—the discipline, the orderliness, the energy and efficiency, the prying police regulation, the subjection of the civil to the military—of its earthly Hellenic prototype. The triumph of German Kultur, then, would have meant an enthronement of the old scholastic realism with its general philosophy of the universal as alone possessed of true being, and its political corollary of the utter dependence of the particular citizen upon the state for his right to existence.

But, even as it is, that realism is for the moment in the ascendant. Fascism and Bolshevism are more extreme and more avowed examples of it than ever the German state dreamed of being. It is also interesting to note that America, who at the time of her entrance into the War conceived herself to be combatting an ideal rather than a people, should all the while have been developing in a form thinly yet sufficiently disguised by the enchanting words "democracy" and "Americanism" the very ideal against which she fought. Her passion for standard-

ization and her intolerance of variety, her multiform scorn and invasion of personal privacy, her willingness to regulate by law the most intimate concerns of the individual in the supposed interests of a petty moralism, her inclination towards theocracy, her impatience with the idea that minorities have rights, and her acceptance and justification of despotism, provided only the despot be called "a majority"—all these betray the growth of a political sentiment in which the community is slowly acquiring a priority of existence and value over the individual, and reducing him to a mere member and instance of itself, and nothing more. And she vaunts the superiority of "Americanism" in the face of the rest of the world, much as Germany boasted of the superiority of her "Kultur."

To be sure, these tendencies are being withstood in America more or less successfully by the tradition of personal liberty. There is a general rebellion all along the line against standardization and community control of the thought and speech, the habits and the life, of the individual, with the result that the United States have now become the chief battlefield of the realistic-nominalistic controversy in its sociological form. But if "realism" wins out, we may expect to see "Americanism," along with Fascism and Bolshevism, take the place of "Kultur" as the next great modern expression of the Platonic idea of the state—minus, it is to be feared, the philosopher-kings, and the wisdom and justness of oversight and direction for which they stood.

## V

We have been for a long time in a position to discover the nature of justice, and we now turn back to follow the main scent. To pick it up again is easy. The state, as Plato has developed it, is ideal, and, being ideal, it will have the great virtues of wisdom, courage, temperance, and, of course, justice. If we can eliminate the other virtues one by one, we shall necessarily come upon justice as the residue. Let us tackle wisdom first. Obviously we do not mean by it a specialized technical knowledge of how best to perform some one function

of social life, like a knowledge of agriculture or of carpentering. We mean political wisdom, or the knowledge of how to run the whole state in the best possible way for all its citizens. Such wisdom will be lodged in a comparatively small, specially endowed and trained group, who by virtue of possessing it will alone be capable of governing the state as an ideal state should be governed. In short, it will be the particular and distinguishing virtue of the guardian class.

Similarly, the reputation of the state for courage or cowardice will not depend upon the general animal bravery or timidity of its citizens.[89] The blind ferocity of the wild beast or the slave will not avail of itself to save the commonwealth. True courage is, as we should say, moral courage. It consists in a knowledge of what things are truly to be feared and in an unshrinking determination to do the right thing, whatever the seeming cost may be.[90] Only by the possession of such a quality can the state hope to make correct estimates of perilous situations and to deal with them wisely and successfully. But obviously such knowledge, like political wisdom, is professional, not universal. To develop it the greatest care must be exercised in choosing fit material and in training it to implicit obedience, come what may, to the behests of the guardians. This picked and highly disciplined body of young men, imbued with courage as its peculiar virtue, will form the soldiery.[91]

Finally we have temperance or self-control. This means obviously the control of the lower part of one's nature by the higher, since both are equally part of oneself. Now in the state the lower side of human nature is apt to be more highly developed in the lower classes, whereas refinement and simplicity and moderation are usually a prerogative of the few who are best born and best educated. Temperance, then, in the state will mean a general recognition of the authority of the upper classes and of the right of the wisest and the best to rule the less educated and less self-controlled masses. This

89 IV, 427 C–429 A.
90 *Cf.* Nettleship, *op. cit.*, pp. 148–149.
91 IV, 429 B–430 C.

recognition will be mutual, will be a willingness of the lower classes to be led, and of the aristocracy to live up to the responsibility for good government laid upon it. So temperance, unlike wisdom and courage, will not be the virtue of a special class. It will be a spirit pervading the whole state—a spirit of agreement all around, based upon a clear perception on the part of all classes that some men are better than others, and that it is the business of the good citizen to find out what his real value is, to acknowledge frankly superiority in others where it exists, and to be ready to trust the judgment of men better qualified than he.[92]

Our quarry, justice, must by this time be pretty well surrounded and run to earth. Indeed, says Plato, there she is, tumbling out at our feet, and what is more she has been in plain sight this long time, if only we had had eyes in our heads. The virtues that we have just been discussing all have one underlying thought and principle—that every man has a particular aptitude and a particular place in the state, and that he should find that place and stick to it and not try to do things for which he is unfitted. The man whose talents and education make him a good ruler will not repine because he is not also a first-class cobbler or soldier, but neither will the good cobbler or soldier think that he can also govern. Each class has its special virtue and function, in the possession and exercise of which it should be content. For, when a man whom nature made a good artisan gets puffed up with wealth and popularity, and tries to force his way into a position of high military or political authority for which he is utterly unsuited, or when one and the same man wants to do and be everything, it is the ruination of the commonwealth. The ideal and just state, then, will be one in which each man has and minds his own business and does not meddle with that of others. And political righteousness will consist in the harmonious working together of all individuals and classes which naturally results from a man's knowing what he is good for, and from his being willing to continue in the station to which it has pleased God to call him and make the best of it.[93]

[92] IV, 213 D–432 A. [93] IV, 432 B–434 C.

If now we apply to the individual this definition of justice as a harmony of the whole in which all parts get their due and perform their specific function without interfering with or encroaching upon one another, we shall find that the shoe fits. In the first place we can prove, though the proof is somewhat complicated, that the soul has three parts or principles corresponding to the three classes in the state. If two things really contradict one another and pull the soul in opposite directions, they must spring from different sources. Now, the blind promptings of hunger and thirst and of our other appetites are opposed in this absolute way to the reflective and restraining influence of thought and reason. We may then distinguish in the soul between reason on the one hand and appetite on the other. But the soul is not exhausted by these two principles. There is a dynamic, passionate element which frequently is at war with desire—an anger, a determination, an uprising and revulsion of spirit that causes a man to grit his teeth and to fight his appetites to death, or to kick himself afterwards for a fool if he has given in to them. This emotional, "spirited," volitional element cannot be called desire or appetite, for it can be used against the desires and the solicitation of pleasure and pain. Nor can it be identified with reason, for it is found in brutes and in children in whom reason is as yet undeveloped. It must then be a third element in the soul.[94]

A parallel between the state and the soul is now easily drawn, and justice in the individual is quickly discovered. Reason, whose specific virtue is wisdom and whose natural prerogative is to organize and rule the whole of the individual's life with a view to his total career, obviously corresponds to the governing class in the commonwealth. Passion, spirit, determination, in the individual is no less obviously the counterpart of the soldiery, whose peculiar virtue is courage, and it should, like the military class, be subject to and guided by reason. Finally, the appetites that preside over the economy of a man's body may be properly likened to the producing classes in the body politic. Reason and spirit brought into accord by a sound education will combine to restrain and

[94] IV, 434 D–441 C.

direct them, just as the guardians and the army conjointly keep the lower classes in place. And when the appetites escape from the control of the higher faculties and enslave and rule their natural-born rulers, or in other words, when a man lacks self-control and temperance, their dominance will work the same ruination in the individual that the desire for power by the masses works in the state. The individual, then, is wise, when he has in him "that little part which knows what is for the interest of each of the three parts of the whole;" he is courageous when his spirit retains in pleasure and pain the commands of reason about what he ought and ought not to fear; and he is self-controlled, or temperate, when his spirit, or determination, and his desires are equally agreed that reason ought to rule, and do not rebel against its dictates. Finally his justice or righteousness, like that of the state, will consist in a smooth and frictionless co-operation of his three parts, in which each minds its own business, whether of ruling or being ruled, and abstains from meddling with another's. In short, to quote Plato's own words, the righteous or "just man does not permit the several elements within him to interfere with one another, or any of them to do the work of others—he sets in order his own inner life and is his own master and his own law, and at peace with himself. . . . When he has bound all these together and is no longer many but has become one entirely temperate and perfectly adjusted nature, then he proceeds to act . . . always thinking and calling that which preserves and co-operates with this harmonious condition, just and good action, and the knowledge which presides over it, wisdom, and that which at any time impairs this condition, he will call unjust action, and the opinion which presides over it, ignorance." [95] Conversely, unrighteousness will be "a strife which arises among the three principles—a meddlesomeness, and interference, and rising up of a part of the soul against the whole, an assertion of unlawful authority, which is made by a rebellious subject against a true prince, of whom he is the natural vassal." For "what is this confusion and delusion but

[95] IV, 441 C–444 A (phrases have also been introduced from Jowett's translation without direct quotation).

injustice and intemperance and cowardice and ignorance and every form of vice?" [96]

The analogy, however, between the soul and the state is not yet exhausted. In our search for the nature of justice we have dwelt upon one form of political constitution only, the ideal form, in which power is entrusted by the people, willingly and as a matter of course, to those best fitted by ability, patriotism, and breadth of vision to govern in the interest of the whole state. This sort of constitution is admittedly a counsel of perfection, a pattern laid up in heaven and nowhere completely exemplified on earth.[97] The nearest approach to it is government by an enlightened monarch or by an aristocracy worthy of the name, just as the man who comes closest to the ideal is the one in whom reason is most dominant. But there are at least four other types of political constitution, which may be arranged in a descending series, and corresponding to them we shall find four kinds of inner life, which may be described as so many stages in a progressive corruption and degradation of the soul.[98]

The first downward step in society and the individual leads to what Plato calls timocracy—a condition in which reason no longer sets the ideal but is made subservient and auxiliary to the pursuit of a goal set by ambition for worldly honors and success. In the state this condition arises from faulty breeding and lack of birth control in the guardian class and from the consequent production of men of a rougher calibre. These individuals are still possessed, to be sure, of the military virtues of discipline and respect for authority, but they are covetous, openly, of distinction, and secretly, of wealth, and suspicious and disdainful of a wisdom that is not used for material advancement. In the hands of such a class the state, while retaining its organization, cohesion, and efficiency, loses its interest in the higher values that constitute true civilization and becomes imperialistic, bumptious, and warlike, a worshipper of efficiency, big business, and expansion.[99] Crete and Sparta

[96] IV, 444 B.
[97] IX, 592 B.
[98] IV, 445 C ff. VIII, 544 A–545 C.
[99] VIII, 545 B–548 D.

are good examples of a state of this sort, Plato tells us.[100] And it is probable that the further decline of simplicity and communism at Lacedaemon, consequent upon the growth of empire, was not without influence upon his description of the next stage of political degeneration, the rise of plutocracy.[101]

The "timocratic" individual, like the "timocratic" government, is one whose reasoning powers no longer direct spirit and ambition, but become their servant and a mere means to their realization. Such a man is apt to be bluff and burly, keen on sports and soldiering, a respecter of persons, eager for the marks of material success, with an eye to the main chance, particularly as he grows older, and with no idealistic nonsense about him. He is frequently the son of some guardian of the old school that sees things in their true perspective and is consequently indifferent to riches and worldly achievement. But the mother is forever complaining to the boy that his father is "only half a man and far too easy going, adding all the complaints about her own ill treatment which women are so fond of rehearsing," or else he is egged on by some old family servant with stories of how easy a mark the master is, and how he is always being "done" by his smarter neighbors. About town, too, he sees that "those who do their own business in the city are called simpletons and held in no esteem, while the busybodies are honoured and applauded." In spite then of his father's influence, his respect for high-mindedness and nobility of vision is shaken, and his ideals become worldly. He has enough reason and wisdom to prevent him from going to the dogs, but not enough to keep him from striving for the things that common men prize.[102]

A natural outcome of this materialistic outlook on life is keenness about money, and thus both the state and the individual sink to the next level of degradation, which Plato calls oligarchy, but which we should perhaps call plutocracy. The class best fitted to govern, discouraged by the fickleness of their constituents and the instability of political office, now go into

100 VIII, 544 C–545 A.
101 Barker, *op. cit.*, p. 250, Adam *ed. Republic,* Vol. II, p. 219, note.
102 VIII, 546 D–550 B.

trade and roll up private wealth, and the more they think of making a fortune, the less they think of virtue and even of such material ways of outdoing their neighbors as fame and glory. The plutocratic ideal quickly infects all classes. Wealth is universally looked up to, a property qualification is required for office, and the rich man, whatever his abilities as a ruler may be, is chosen as governor. Moreover, the state falls apart into two classes, the rich and the poor, who are always at loggerheads. The upper classes, diverted by their newly acquired business interest from their proper function of government, think only of making money, and, growing avaricious, do their best to evade their taxes and shirk their due part of the financial burden. Then, too, having become too soft to fulfil their function of defending the state, they are forced to arm the masses in an emergency, and thus they raise up against themselves an internal enemy more to be feared than any outer foe. Meantime, at the other end of the scale poverty breeds pauperism, and pauperism discontent and all sorts of crime, and a class of "drones" comes into existence, always out of a job and ready to do any mischief with their idle hands.

The degeneration of the individual character is a pocket edition of that of the state. The "oligarchic" or "plutocratic" man comes into being through the ruin of a materially ambitious and glory-loving father. As he inherits no noble ideals and has lost the consolations of philosophy, he feels that he can make good only by devoting himself entirely to some trade through which he can amass a fortune. Money becomes his one passion, and to accumulate it he will resort to anything. Virtue with him is enforced and hypocritical, springing not from reason but from fear and external compulsion. Culture and the other refinements of existence he scorns utterly, since they do not pay dividends and bring in profits. In a word, avarice takes the place of ambition in his character, and he becomes mean and miserly, intent only on accumulating wealth and with no thought or knowledge of how to spend it and get something for it. And to this ignoble end his whole nature, reason, spirit, and appetite, is wholly enslaved.[103]

[103] VIII, 550 B–555 A.

Upon this political and mental condition the third degree of corruption, democracy, follows hard. In the state the rift between wealth and poverty is always increasing, and the ranks of the poor are constantly being recruited by the ruin and fall of the rich, who are all the more bitter and dangerous because of their former prosperity. The upper classes, on their side, especially the young, become more and more luxurious, idle, and insolent. Eventually the masses discover the weakness and softness hidden behind the show and "side" of their rulers, and the slightest thing precipitates a revolution that brings the masses into power. But the resulting "democracy" is worse, even, than plutocracy. In plutocracy there was at least some cohesion, some focus, some unifying end, however mean and far from the true good it might be. But with the state in the hands of a proletariat wholly ignorant of the higher values and fooled by the magic name of freedom individualism goes on the rampage. Every one does what he likes, with no regard for the law or the welfare of society, and with no respect for principles or standards of any sort. Call it liberty and democracy, if you will, but it is really anarchy. Plato here is undoubtedly expressing not only his own but his master's opinion about democracy, and we may recall from a previous chapter the scathing passages he puts into Socrates' mouth.[104]

This picture, provoked by the condition into which the Athenian democracy had fallen, has its counterpart in the moral chaos that reigns in the inner life of a "democratically" constituted man. After a brief struggle with the avaricious propensities handed down by his father the life of pleasure, suggested by boon companions, gains the day, and the check impressed upon his appetites by his over-thrifty and penurious inheritance is flung to the winds. Wisdom and philosophy, ambition and love of honor, are beyond his ken, so that once the restraint of avarice is removed his soul has all the room in the world for the invading horde of desires and pleasures that now enter in and lord it over him. He becomes the abiding place of "insolence and anarchy and waste and impudence" decked

[104] *Cf. supra*, p. 7.

out with the fine names of breeding, "liberty, liberality, and courage." He simply "lives from day to day indulging the appetites of the hour." His will, like the will of the people under a democratic form of government, expresses itself in impulsive and unreflective acts, not in enlightened and consistent legislation. He flies from one extreme to another, trying his hand at vice, virtue, debauch, abstinence, athletics, idleness, philosophy, politics, soldiering, business, and what not, according as the whirligig of his caprice flies round. His life has no point, no focus, nothing to organize and steady it. It is "motley and manifold and an epitome of the lives of the many." If he pulls himself up at all, it is at the best by a mere balance of pleasures, none of which he despises, and all of which he indulges equally. "And this distracted existence he terms joy and bliss and freedom." [105]

But the worst is yet—and quick—to come. There is one thing worse than democracy, and that is tyranny. And into tyranny democracy, betrayed by the very liberty that is its chief boast, naturally lapses. For the license engendered by liberty breaks down all respect and reverence of the young for the old, the son for the father, the woman for her husband, the slave for his master, the governed for those whom they single out as governors. Nor does democracy do away with class distinctions or abolish poverty. On the contrary, we still have a lower, working class, which makes up the great majority of the state, and a small upper, well-to-do element. Moreover, there will be the same old swarm of "drones"—spendthrifts, paupers, crooks, parasites, and the like—that were the curse of a plutocracy. But, whereas under a plutocratic régime they were kept out of office, in a democratic state they become politicians and form a kind of third party which holds the balance of power and practically runs things. These gentlemen pose as champions of the masses, and their favorite trade is advocating confiscatory measures for squeezing the rich. They pretend that they wish to equalize wealth and distribute it among the poor, but most of what they squeeze goes into their own pockets. The rich in their turn organize themselves

[105] XIII, 355 A–562 A.

against the poor for self-protection, and a scandalous state of plot and counter-plot, of "impeachments and judgments and trials of one another" ensues. In these circumstances it is not difficult for some rascal to constitute himself a sort of *tribunus plebis*, foment a revolution, demand a bodyguard as a protection against the enemies of the people, and eventually seize the supreme power, just as Plato's pet aversion, Dionysius I of Syracuse, to whom this account is obviously dedicated, had done. At first the newly fledged tyrant curries favor with the masses by liberating debtors and distributing land. But at the same time he does his best to keep them poor in order to render them innocuous, and he plunges the state into war after war so that his leadership may be required. The best and the noblest of his erstwhile supporters he gets rid of, and he purges the country of all that is best in it. In their place he surrounds himself with satellites of his own creation—the worst "drones" of all—and with their help and that of his bodyguard he can put down any attempt of the lower classes to rise against him and dethrone him. So the people find too late that in trying to escape the smoke they have fallen into the fire.[106]

The kind of inner life that corresponds to tyranny in the state means the complete domination of the individual by all that is worst in him. The "democratic" man at least wavered and alternated between good and evil, and by balancing his pleasures against one another attained a certain equilibrium of life. In him the wild beast latent in all of us only peered out in sleep, as Plato remarks in a quite Freudian way. But the tyrannical man has no "censor" to keep the unconscious from becoming conscious, and is completely off his head. He is the victim of a mania, generally of lust, and to satisfy it he will stop at nothing. He has no inhibitions to restrain him, and he becomes "always and in waking reality" what the ordinary man "is very rarely and in dream only." It is his like that make up the criminal element in a state—the "mercenary soldiers, thieves, burglars, cut-purses, foot-pads, robbers of temples, man stealers" . . . informers, bearers of false witness, bribe-takers, and the like.[107]

[106] VIII, 562 A–569 C, *cf.* IX, 575 C–578 B. [107] IX, 571 A–575 B.

As tyranny is the most miserable of all forms of government and the farthest removed from the ideal of constitutional monarchy, so the "tyrannical" inner life is the most miserable of lives, full of meanness and a slave to madness. But most terrible of all is it when a man of this sort is raised to power as a tyrant. The evils of tyranny are then seen in their extreme form, and nothing could be worse than the spectacle of a man unable to rule himself put into a position where he has to try to rule others. A tyrant in name, he is in fact a slave, living ever in fear, forced to lick the boots of the vilest of mankind, and full of desires that he cannot satisfy. Day by day he must perforce become "more jealous, more faithless, more unjust, more friendless, more impious," if he is to maintain himself in power.[108]

We have now followed to the limit the progressive degeneration of both the state and the individual, and we are ready to draw our moral. Three points particularly have been brought out. In the first place we have further refutation of the old argument advanced by Thrasymachus and Polus that might is right and that the unjust are happier than the just. The best and most just man has been shown to be the happiest, and the worst and the most unjust man to be also the most miserable. Again, we have established reason in the individual and the philosopher in the state as the sole arbiter of what is best. The threefold constitution of the soul and of the body politic confirms the truth of the Pythagorean division of all men into lovers of wisdom, lovers of honor, and lovers of gain. Each class, of course, will praise its particular kind of life as pleasantest and belittle the pursuits and pleasures of the others. But the philosopher, the lover of wisdom, has a great advantage. He has tasted the other delights and reflected upon them, whereas the lovers of honor and of gain do not as a rule learn anything of "the sweetness of learning and knowing truth." But the pleasures of which the wise man, with all his breadth of experience and his depth of insight, most approves are the pleasures of thought and reflection. Hence these pleasures must be adjudged the best.[109]

[108] IX, 575 C–580 A.

[109] IX, 580 A–583 B.

As his third point, Plato re-examines pleasure as a candidate for the good, in the light of the tripartite division of the soul. Perhaps his hedonistic friends were giving his ethical theories a rough time of it, and their objections had to be dealt with. In any case he returns to the attack from a new angle. Pleasures and pains, he points out, are very deceptive. Mere cessation of pain is often considered pleasurable, and *vice versa*. But it cannot be really so, for both pleasure and pain are motions or activities of the soul, and cessation of a motion is rest, not another movement. Moreover, psychologically speaking, pleasure is a positive quality, and its pleasurableness in no wise depends upon the contrast of pain preceding or following it. When, therefore, we seem to find pleasure in the mere stopping of pain, we are really being fooled. We are comparing the absence of one feeling with the presence of another, a state of motion with one of rest, and are tricked into believing a mere appearance to be a reality. Furthermore the mere anticipation of pleasure or pain is often imagined to be the thing itself, and here again we are victims of a deception, mistaking in this case a state of rest for one of motion, and a neutral condition of consciousness unprovoked by external stimulus for a case of well-founded, positive feeling.

The psychology of this is all very dubious and difficult, though Plato seems to have in mind the distinction that we, too, make between real and imaginary fears, pains, and the like.[110] But the point to which the discussion leads is obvious. In the *Protagoras* and the *Gorgias* we learned that pleasure is not the judge of its own goodness. Now we find that it is not even the judge of its own reality. Just as there a further criterion was necessary to determine what pleasures are preferable, so here it is needed in order to decide what pleasures are really pleasures. In the one case as in the other it is reason that comes to the rescue. Obviously the pleasures that arise from the less real part of ourselves will themselves have less reality. The body, being subject to change and corruption, is farther removed from true being than the soul, whose delight lies in contemplating the eternal and the changeless. Bodily

[110] *Cf.* Nettleship, *op. cit.*, pp. 323 ff.

satisfactions and pleasures, then, will belong to the realm of appearance and will be full of deception. Similarly the longings and delights of the heart whose ambitions are set on the glories of this world also move on the plane of sensible phenomena and share their unreality. It is to the soul, whose essence comes nearer to true being and whose concern is with real existence, that we must look for the real pleasures of wisdom and virtue as compared with the illusory delights of the senses and of material success. The pleasures of thought are pure and unmixed. They cannot be mistaken for mere cessation of pain, for no pain or want precedes them. Neither are they followed by a sense of surfeit and tedium. Furthermore, it is upon reason and knowledge that we must also depend to choose from the lower and less real satisfactions, connected with the body and with material ambitions, those that are natural and necessary to a composite being situated as man is, and that are therefore best and most real of their kind.[111] Virtue and justice, indeed, just because they mean giving each part of human nature its due, as well as keeping each to its place, produce the maximum of pleasure all round.[112] Once again, then —and Plato reiterates the point at length and indulges in some symbolic mathematical computation to prove it—Thrasymachus is wrong both politically and ethically. Cold figures show how many times happier the constitutional monarch is than the tyrant, and how much more pleasurable the practice of justice is than that of injustice.[113]

We have now reviewed the earlier material bearing upon Plato's moral theory, and are in a position to summarize our results to date. We shall make things plainest to ourselves, perhaps, if we regard his ethics as having two sides, a defensive and a constructive, remembering, of course, that they are so interlocked as to form a single line of thought. On the one hand, we have found him launching attack after attack upon the Sophist—Cyrenaic Hedonism, which apparently was an active and dangerous foe and gave him no peace. On the other, we have seen him building up and strengthening behind

111 IX, 580 D–586 E.
112 IX, 586 E–587 A.
113 IX, 587 A–592 B.

this offensive-defensive his own position regarding the nature of the good. His criticism of Hedonism we need not review. Pleasure has a Freudian fascination, and everything connected with it naturally sticks in the memory. Moreover, we shall return to it in a moment, when we come to the *Philebus*, where Plato takes up its claims for the last time and gives them a final weighing against those of wisdom or reason to be the preponderant element in the good. For the moment we are only concerned to sum up the more positive and constructive aspect of his theory, and to this we turn.

Very early in his examination of Hedonism, as we have seen, Plato found himself thrown back upon a standard quite independent of pleasurableness for determining whether a given pleasure was good or not. But what was this standard? In the so-called "Socratic" dialogues and in the *Protagoras* he had proved to his own satisfaction against the Sophists that the virtues are really one, and that their principle of unity is knowledge of man's best interests. But Socrates himself, or at least Socrates as he is usually and more conservatively portrayed, never gave any clear picture of what those best interests are. Plato undertakes to answer this question by a thorough examination of human nature. In the *Gorgias* he points out that just as each organ in the human body has a specific operation or virtue expressive of its nature, so the human being as a whole may be expected to have a distinctive human function, the fulfilment of which will bring happiness. The man in whose career this function is expressing itself will be virtuous, or, to use the Platonic term, "just." But a study of human nature shows it to be composite. Society is composed of many individuals, the individual of many impulses. Hence the proper function of human nature will also necessarily be complex. It will not lie in the exercise of any one element to the exclusion or harm of the others, but in a harmonious co-operation of all elements, so that each sticks to its own place, attends to its own business, and receives its due share in the fulfilment of the whole. Incidentally, this manifold but harmonious operation of a man's total nature, like the healthy activity of a special organ, will be attended by

pleasure, which is added to it as a kind of prize or pay for suitable functioning. But the harmony is not sought for the sake of the pleasure that accompanies it, but because it is the natural end at which human activity is aimed. Indeed, pleasures will be judged good or bad according as they vibrate in unison or are discordant with it.

Righteousness or "justice," then, will be a harmony of the different impulses that compose the total individual will, and of the individual wills that make up the community. But how are we to tell real harmony from real discord? The two may not be so easy to distinguish. The moral ear, like the physical, may conceivably differ in different individuals, communities, and times. Shall we not be forced therefore either to seek a still further standard for distinguishing the harmonious from the discordant—which might lead us on *ad infinitum*, or perhaps back to pleasure—or else return to the old Sophist doctrine of moral relativity from which we started?

Whether or not Plato sees the possible threat of such an objection, he forestalls it by appealing to experience. The various stages in the corruption of the state and of the soul seem designed to show the kinds of life in which there can be no real harmony, and therefore by implication the only sort of society and individual in which it can be found. Take, for example, a life governed by the play of desire. It is notorious that the appetites, if left to themselves, produce not order but anarchy. In their headlong rush towards satisfaction they get in each other's way and block each other's fulfilment. Moreover, the ends on which they are set prove will-o'-the-wisps, and the seeming pleasures that accompany them turn out only too frequently to be mere negative cessations of want and pain. A life ruled by them will be at the best a hit-and-miss affair always dominated for the moment by the latest impulse. At the worst, it will mean abandonment to the tyranny of one devouring mania. If will and reason are to be dragged in the train of the appetites, no harmony or balance of any sort can result.

The same is the case when a man allows himself to be run away with by his natural proclivity to strive, and compete, and win out, and get to the top. The will to succeed, if left to

itself, is apt to be fascinated by the glories of this world and to stake human happiness upon the precarious and hollow satisfactions of material accomplishment. Ambitions like those for fame and wealth introduce, to be sure, some sort of perspective into life, but a perspective whose falsity is betrayed by the fickleness of fortune and of popularity. No real harmony can come of enslaving the intelligence and mortifying the appetites and the affections in the interest of money-making, or office-holding, or climbing to any purely mundane eminence.

In fine, we may say with authority that it is impossible for any human being, whatever his place, time, nation, and circumstances may be, to make the best of himself and get the most out of life, unless he exercises thought and intelligence and is guided by them. The mere process of elision, then, leaves us with the man dominated by reason as the sole candidate for complete harmony and righteousness of character. It remains for us now to see whether a searching examination of the activity of reason will bear out this claim and justify us in believing that perhaps, at last, we have found the truly and universally good element in human life. In opening our inquiry we are at once struck with the fact that reason has characteristics not found in the other constituents of human nature. In the first place, it is a natural-born ruler and harmonizer—which the others are not. Make the natural appetites or ambitions their own masters, and they only succeed in stultifying themselves because of their inborn shortsightedness and impetuosity. If they are to get the most out of themselves and realize even frankly sensual or worldly ends, they must go to reason for advice and guidance and place themselves unreservedly in its hands. Hence reason is an indispensable factor in organization and harmony of any sort. But thought and reflection are more than mere means. They form a third element in human nature, and their exercise in and for themselves might claim *a priori* to be at least as much of an end, and as much a part of the total self-realization of a man's life, as sensual satisfaction or material success. When we come to test this claim we find it more than substantiated. Thinking just for the fun of it proves to be a source of im-

mense and never-failing delight. To survey the world as a whole, to see through it, to ferret out its true values and run down the reality that lurks behind the appearance, is one of the most exciting and compelling of human activities. And correspondingly, so far as his inner and moral being is concerned, the power whose exercise raises man above the other animals, gives him a God, and makes him a creature himself half divine, lies just in his ability to transcend through memory and anticipation the immediate moment of experience and to survey his particular life from the heights of reason as a career with a plan and goal. Nor is there anything more seductive and thrilling to him than the sport of creating himself in the image of that vision, and of realizing in himself the most and the best of which his species is capable. Thinking and living in accordance with thought are the most important things that we are wound up to do, and any interference with them throws all our other functions and our whole life out of gear. Moreover, they can go on independent of external circumstance, unaffected by the failure of the senses and the vicissitudes and unkindness of life. The pleasures, too, with which the functioning of reason is paid ring true. The never-blunted edge of their keenness, their freedom from admixture of pain or aftermath of satiety, their permanence and reliability, standing out as they do in sharp contrast to the unstable, passing, deceptive rewards of worldly achievement and of the indulgence of the appetites, attest that they spring from an intercourse of what is essential in man with what is essential in the universe. In a truly righteous and harmonious life, then, the satisfactions that arise from the exercise of thought and intelligence are the satisfactions that should come first. Where there is a conflict or a discord that can only be resolved by elimination and suppression, all else must be sacrificed to them. Because of the superior sweetness and richness of their tones, it is their responsibility and prerogative to set and voice the *leit-motif*, which it is the business of the will to reinforce and of the senses to embroider. Only in a disordered life will the accompaniment be allowed to drown the theme.

But the exaltation above all else in human nature of the worth

and goodness of thinking must not be interpreted, for the moment at least, in too narrow and intellectual a sense. There are, to be sure, some tendencies in Plato, which we shall presently note, to contrast the faculty of thought to our other activities in a dualistic way, as a principle of good set over against a principle of evil. But the life of reason, as Plato is now developing it, is something far wider and with no dualistic implications. It is the harmony of many different instruments, not the solo performance of one side only of our nature. It is not thinking to the exclusion of all other activities, but thinking in the service of the completest possible expression of every interest. A man who found no place in his career for the world or the flesh would be unbalanced. Human nature, being possessed of a body, passions, and parts, and being placed in a material environment, is rounded out and enriched by the exercise of the senses and the physical functions, and by worldly activity and achievement. Hence for reason to attempt to oust emotion, interest in the world, and bodily appetite and pleasure from life would be almost as irrational as for desire and passion to seek to banish reason.

Moreover, it is a characteristic feature of reason that it is the only faculty capable of just this moderation and unselfishness. The senses, the passions, and the ambitions can only assert themselves by enslaving all else to their particular ends. But reason somehow expresses and asserts itself by subordinating the demands of the other sides of our nature, not to its own particular interest in thinking, but to the self-realization of the whole of human nature. And to this larger whole it also instinctively subordinates itself. Its highest satisfaction, in fact, lies just in assuring the greatest good of the greatest number of the functions that make up the human being—of which it itself is one. The very essence of reason is the balance and proportion of all the elements, including itself, with which it works. It is like the first violinist who sometimes leads the orchestra in which he also plays. He, too, carries the air and makes the dominant contribution to which all else must be subjected. And yet in his directing he subjects his own playing, as well as that of the other instruments, to a harmony that

includes and exprcsses them all. The life, then, directed by reason—in other words, the truly godly, sober, and righteous life—will be one that is completely and symmetrically developed, with no one interest or function over-emphasized, and none suppressed or slighted.

So far, we have been almost entirely dealing with and stressing a strain in Plato's thought that we may call characteristically naturalistic, pagan, and Hellenic. For the "all round" moral ideal, the ideal of finding the good by opening every possible window on life and allowing its light to shine in through every side of our nature, seems to have been dominant in Hellenic thought and action. Or at least the illusion that it was so has come down to us as one of the most precious of the contributions made by Greece to civilized living. If paganism means anything to us, it means the justification of the natural man and the possession by the good of body, passions, and parts. And the happiness it revcals is the happiness that lurks in any animal's finding itself alive, and that is captured for us by the exercise of all the capacities, physical, emotional, and intellectual, with which the human animal comes endowed. This heritage of sanity and mellowness, of joy in the life of the body and of sensitiveness to beauty in all its forms, this endowment of subtle and keen delight in observing and meditating upon man and the world and of passion for thinking and knowing and running the truth to earth, was bred in Plato's bone and ran without transfusion in his blood. He was, then, prompted by much in his tradition and temperament to view the good as something inclusive, not exclusive, built, not of any one, but of all the materials provided by our organic interests and desires.

Yet therc was also much, not only in his particular circumstances but in the spirit of his age, to impel him in the opposite direction towards an ethics anti-worldly in its teachings and aimed at a supernatural goal. Paganism was not altogether whole-heartcdly for perfecting the natural man and realizing the good through an organized fulfilment of his whole nature within the limits imposed upon it by the circumstances of finitude and mortality. Greek thought, being after all but

human, was subject to strange hopes and fears, to convictions of sin and sicknesses of the soul, to intimations of immortality and of an unearthly destiny only to be attained by the renunciation of much that the natural man held dear. Mitigated as these symptoms were by the dominant, naturalistic mood, they nevertheless indicated a real troubling of the Greek spirit, which philosophy and religion could not throw off. Of this tendency in religion the great, non-conformist, Orphic movement was the most pronounced expression, with its mystical vision of the soul, divine in substance and origin, held captive by the senses and the body as in a prison or tomb, and at length redeemed from the wheel of birth and rebirth and returned to the Godhead through adherence to the tenets of the way of life imposed by the sect. And the essential Orphic teaching had been taken over by the Pythagoreans, and its dualism had been emphasized by the opposition, metaphysically, of Limit to the Unlimited, and morally, of the soul to the body, as a principle of good to one of evil. Again, Socrates, if we regard him as inspired by the Pythagoreans and credit him as well as Plato with the doctrines we are about to discuss, had been greatly influenced by this dualism. And, even regarded more narrowly and relegated to his traditional place, he had developed a puritanism of sorts, restricting the conditions of happiness to virtue, seeing no good in aesthetic enjoyment, and disparaging the satisfaction taken by the intellect in pure science and philosophical speculation. The Cynics, too, had damned all the pleasures and amenities of existence generally as hindrances to good living, and had developed a narrowly intellectual and arid view of the life of reason.

To these influences as well as to the dominant Hellenic tradition Plato fell heir, and, as we saw in discussing his career, there were sides to his character, religious, mystical, visionary, that in the right circumstances might be turned so as to mirror and reflect them. It needed only a shock, a disillusionment, to convert other-worldliness into anti-worldliness, and this shock was given by the death of Socrates. We shall not be surprised, then, to find a good deal in the Platonic philosophy that seems counter to and is, indeed, inconsistent with the naturalistic

outlook on life we have just been portraying. Thus the Orphic-Pythagorean, and possibly Socratic, doctrine of the origin and destiny of the soul was taken over spirit and letter, with its dualistic implications if anything intensified. The soul is violently contrasted with the body, as the only principle of good with one of unmitigated evil. Man is akin to the divine and falls from heaven;[114] his incarnation is a lapse from perfection and a confession and punishment of sin;[115] he is disfigured,[116] imprisoned,[117] and entombed,[118] as long as he is in the body; his earthly good consists in having as little to do as possible with the flesh in which he finds himself;[119] and the process of salvation lies in a purgatorial cleansing from the defilement suffered here below, and in an eventual escape from all contact with natural life into a supernatural sphere.[120] These views are, of course, difficult to reconcile with the naturalistic doctrine of the soul as tripartite, set forth in the *Republic*, and even with the sense of the myth in the *Phaedrus* that the soul is possessed as naturally of the inclinations that bring her down to earth as of those that raise her to heaven. The results of the inconsistency are to be seen, perhaps, in the tendency in the later dialogues to distinguish two sorts of soul, the rational and immortal on the one hand, the irrational and perishable on the other[121]—a doctrine that at one point leads Plato to speak of an evil world-soul,[122] and to verge on adding a devil of sorts to the world and the flesh.

Teaching like this we should expect to frame at the best a mystical ethics of renunciation, at the worst an arid puritanism, and it cannot be denied that both these tendencies crop up from time to time in Plato. In the *Republic*, for all its eagerness to remould human affairs after an ideal pattern, there come pessimistic moments when the philosopher is told to despair of doing any good deed in so naughty a world as this, and to retire for true fulfilment from all contact with mundane and fleshly things to undisturbed contemplation of the ideal.

114 *Phaedrus*, 245 C ff.
115 *Phaedrus*, 248 A ff.
116 *Republic*, X, 611 C.
117 *Phaedo*, 62 B.
118 *Cratylus*, 400 B.
119 *Phaedo*, 64 D ff. *Theaetetus*, 176 A.
120 *Phaedo*, 66 C ff., 113 D ff.
121 *Timaeus*, 69 C ff., 72 D. *Polit.*, 309 C.
122 *Laws*, XIII, 961 D ff.

In the *Theaetetus*, too, the truly moral life, the life that brings us nearer to God and makes us like him, consists in flying away from the inextinguishable evils of earth and mounting up to heaven as quickly as we can.[123] And the note sounds again and again throughout the Platonic philosophy, as it must in any system pervaded with mysticism.

Moreover, in dealing with earthly things this mysticism is apt to translate itself into an attitude, now of a rather narrow intellectualism, now of puritanism. The life of reason tends to be regarded, not as a subjection of all our interests, including the directive function of thought, to the harmonious working out of an all-inclusive symphony, but rather as a solo performance, played by the only really good instrument in the lot, the accompaniment of which by the others is a sign of necessity rather than of virtue, and must be minimized since it cannot be wholly suppressed. Towards this idea of thought as the exclusive purveyor of happiness, Plato is continually veering. And so far as the "puritan" tendencies are concerned, we are familiar with the diatribe against the arts and its apparent subjection of the aesthetic to the "moral" side of our nature; and in the *Laws* we shall find a kind of religious and moral fanaticism, and a willingness to go to lengths that strike us as unduly harsh in imposing upon the citizenry a godly, sober, and righteous life.

Still, the fact remains that, though this point of view figures prominently in Plato's general attitude towards the world, it never really invades his systematic ethics. Indeed, the inconsistency we have pointed out is not so much a cleavage within his theory of morals, as a failure of his ethics as a whole to accord with other points, both of spirit and letter, in his philosophy. Whenever he deals with morals scientifically rather than emotionally, he develops the broader, naturalistic idea of the good. This is true not only of the theory set forth in the *Republic*, but it also seems to be his last known word on the subject. For, in one of the latest dialogues, the *Philebus*, in which he returns to the subject of Hedonism, and re-weighs the claims of pleasure against those of wisdom or reason, he comes

[123] *Theaetetus*, 176 A ff.

to much the same conclusions as in his earlier work. Since the ethical part of the dialogue is a final résumé of his reflection upon the moral good, we may anticipate his views and purloin them from his later philosophy to serve as a summary of his mature thought.

The conditions that provoked the dialogue may be guessed at. Hedonism was still rampant. The Cyrenaics were not to be downed, and worse still, the philosopher-astronomer Eudoxus, who, we may remember, had been in his youth a pupil of Plato's and later returned to Athens with a band of students of his own, had adopted, apparently from Democritus, the doctrine that the good is pleasure and was teaching it within the walls of the Academy itself. His opinions made considerable stir, and were vigorously combated by Plato's nephew, Speusippus, with the rather extreme thesis that pleasure is actually an evil.[124] On the other hand, the claims of wisdom or reason, conceived rather narrowly and intellectually to be the good, were being championed by the Megarics and the Cynics. In these circumstances Plato was apparently moved to enter the lists himself and review the situation.[125]

The *Philebus* begins abruptly and without artistry of *mise-en-scène*, as is characteristic of the later dialogues, and the question whether pleasure, or wisdom, or possibly some third thing is the good is immediately raised. All pleasures, Socrates admits, are pleasurable to be sure, but this does not mean that all pleasures are good.[126] There are differences between pleasures, just as there are differences also in the kinds of wisdom,[127] and it is to these differences that we must look for the distinction between good and evil pleasures. Let us then classify pleasures, and, for that matter, the kinds of wisdom, too. If we do so, our task of comparison will be easier.[128] But first we may agree upon on one point. Pleasure without the power of knowing and reflecting upon it would reduce a man's life to the level of an oyster's; and similarly the power to think without the power to enjoy would leave life a

124 Raeder, *op. cit.*, p. 357; Burnet, *op. cit.*, p. 324.
125 Burnet, *op. cit.*, p. 324.
126 12 D–13 B.
127 13 B–14 B.
128 18 E–19 B.

dreary affair, not worth living. The good, then, we may say with assurance, will be neither mere pleasure (as the Cyrenaics and Eudoxus maintained) nor mere wisdom or reason (as the Cynics and Megarics taught). It will rather be some degree of mixture of the two.[129] The immediate question at issue becomes whether mind or pleasure is the more important ingredient, and it is to determine this point that our classification will be carried on. For a standard of classification Plato turns to metaphysics. To all things there are four aspects; first, a certain degree of indefiniteness, or moreness and lessness; second, a limited and definite character; third, the mixture of definiteness and indefiniteness, of rigid form and sense appearance, that makes up each concrete, particular object; and finally, some cause or reason that effects the mixture.[130] Now, obviously pleasure, which, like pain, admits of more and less, and which would have to be unlimited in quantity and degree to be wholly satisfactory, is indefinite and fluid in character, and belongs in the first class. As obviously, the good life, being a mixture of pleasure and wisdom, belongs to the third class. To the fourth we must assign our mind or reason, which determines the proper mixture of pleasure and wisdom in us, and is part of the larger world-mind that brings fluid matter and definite form together and combines them in an orderly universe.[131]

The second class Socrates leaves for the moment unfilled, and turns immediately to consider pleasure in further detail. His argument is largely a reiteration of that in the *Gorgias* and the *Republic*, and we need not go into it at length. He amplifies somewhat the psychology of pleasure set forth in the *Republic*, correlating pleasure and pain with motions tending to disturb or restore the harmony of the body and violent enough to reach the soul. And he adds that the native impulse of the body becomes conscious desire, which, reinforced by experience and memory, give birth to images and anticipations of pleasure.[132] Backed by this psychology, he makes once more a point with which we are already familiar, that these images

129 21 A–22 B.
130 23 B–27 D.
131 27 D–31 A.
132 31 B–35 D.

and opinions are often false, and that the pleasures arising from them stultify themselves and cannot, for all their pleasurableness, be regarded as true and good pleasures.[133] Also, he returns again to intensity or quantity as a criterion of goodness, showing that it will not work, since the pleasures of a morbid are often more intense than those of a healthy condition, witness the delight of a feverish person in drinking. Moreover, they are inextricably mixed with want and pain, as in our old example of itching and scratching and, for that matter, as in many of the most intense emotions like anger, desire, sorrow, fear, love, and the like. In a word, only the pleasures that are unadulterated and pure and that accompany reasonable and right opinions and anticipations can be considered wholly good.[134] Hence "he who would make us believe pleasure to be a good is involved in great absurdities." Indeed, such a man, arguing that the seat of pleasure is the soul, would have us believe that the characteristic virtues of the soul are not really good, or that the good man is bad when suffering, the bad man good when enjoying.[135]

Having disposed of the defenders of pleasure as the good, Plato turns his attention to the claims of wisdom. Knowledge cannot be used as a blanket term. It, too, has degrees of accuracy, of more and less. The sciences, for example, lack exactness in proportion as they are not mathematical, and some sorts of mathematics are purer than others. Of the purity of dialectic, or the contemplation of eternal, unchangeable, and unmixed Reality, there can, however, be no doubt. If, then, we are to maintain that wisdom is the good, we must confine ourselves to pure wisdom.[136]

Plato is at last in a position to describe the composition of the good life. It will be a life that includes both pleasure and knowledge. Of that we are agreed at the start, for neither the one nor the other is self-sufficient. The pure pleasures and pure sciences will take their places there as a matter of course. However, being in the world and the body, we cannot do without the applied and less exact sciences, and also with-

133 44 D–55 A.
134 35 D–44 D.
135 44 D–55 B.
136 55 B–59 E.

out the necessary pleasures that accompany healthy physical functioning. But to combine all these so as to procure the best and happiest life, we must have an ideal of symmetry and measure, or, as we might say in the words of the *Republic*, of harmony. Symmetry and measure are beautiful and also akin to truth—so that the mixture of sciences and pleasures they suggest will constitute a true and beautiful life.

We can now arrange in the order of their importance the various elements that make a moral order possible and enter into the moral life. In the first place, there must be really such a thing as symmetry—an eternal Form or Nature of symmetry in general—for otherwise concrete things or particular lives would be without even the appearance of measure and harmony. Next, comes that modicum of individual symmetry which comes from modelling oneself upon such an ideal. Third, there is reason or wisdom, which, rather than pleasure, is plainly the instrument for grasping truth, measure, and real beauty and for incorporating them in the individual's career. Then come the arts, the true opinions, and the various branches of knowledge, whose possession and exercise do the practical work of ordering our lives wisely and well. And finally we have the pure pleasures that "accompany, some the sciences, some the senses." [137]

Such is the judgment passed by Plato upon the dispute in his own school between Eudoxus and Speusippus, and, outside of it, between the Cynics and the Cyrenaics. It is the product of his later years, and the opinion it expresses is the last word we have of his on ethics scientifically considered. We find there little trace of dualism or one-sidedness of any sort. There is no asceticism, no uncompromising opposition of the soul to the body, no puritanical suspicion of enjoyment in general, no tendency to construe the life of reason narrowly as a life of thought to the exclusion of the rest of our nature. Indeed, Plato seems to be as suspicious of an arid, over-intellectual view of the good life as he is of the lushness of Hedonism. He is pushing home with more dryness, concision, and scientific analysis the points made in the *Republic* that human nature is

[137] 60 A–67 B.

not simple but complex, and that justice and happiness lie in the pulling together and harmonious teamwork of all its parts, not in the suppression of one part by another.

Still, and here our hesitancy perhaps reflects Plato's own mind in the matter, we should not underestimate the influence of the dualistic, the ascetic, and the mystical influences upon his general view of the moral life. We are probably safest in arriving at no conclusion and in not trying to weld elements that will not fuse. We can only say that Plato seems to have been swayed now in one direction now in another by two antagonistic forces. On the one hand, there was the characteristically Hellenic, pagan impulse to build a sovereign good out of the possibilities and the splendors of body and mind, sense, emotion, and thought, with which nature has endowed the human animal. On the other, there was the mystical impulse to find none of the natural goods satisfactory or realizable, to seek true happiness and salvation by flying away from earth and the natural man to some purer and higher, supernatural sphere, and to fledge ourselves for the flight by an austere rule of life as far withdrawn as possible from contact with the world of sense and material accomplishment. The mixture of two such motives cannot but be somewhat cloudy.

We shall not try to decide a state of mind in itself probably undecided. As it is, certain all-important points for our discussion stand out clearly and distinctly. In the first place an analysis of the moral situation, like an analysis of love, leads us irresistibly to the conclusion that besides the flux of becoming there exists a realm of universal types and laws good for all times and places. Wherever there is a moral order of any sort, wherever the terms justice and righteousness have any meaning, the essence of that order and the definition of those terms are the same, yesterday, to-day, and forever. Harmony, measure, symmetry, turn out to be always and everywhere true descriptions of the goal that it is the real purpose of all moral life, however primitive and groping, to attain. There must, then, exist an abstract and eternal Form or Idea of the moral good to explain the existence and nature of moral conduct, just as there must be an abstract and eternal Essence of

beauty to explain the existence and the aim of love. Clear-sighted conduct, in a word, no less than clear-sighted love, redeems man from the flux, sets his feet upon the sure ground of the Real, and gives to his life the value of eternity.

It follows that Plato's ethics, even in its most naturalistic and healthily pagan moments, is always bound up with metaphysics and has a supernatural, or at any rate a super-terrestrial, basis and sanction. Whatever the formula of the moral good may be—whether it includes or excludes the world and the flesh, and describes man's physical nature and earthly interests as the enemy or the ally of a complete moral fruition of his life—that formula is in any case let down from the heaven of the Ideas and is apprehended directly by the inner eye of the soul. It is not provisional, relative, and flexible, rinsed clear of metaphysical starch, as later Aristotle was to develop it. The proportion in which the ingredients of the good life must be mixed is a fixed quantity as deeply and directly inherent in the nature of Reality as the properties of the circle or the triangle, and it has all the authority and the rigidity of a truth once and for all delivered unto all mankind. We must not then be deceived by the naturalistic and "scientific" phases of the Platonic ethics into supposing that the system had a naturalistic and empirical basis. Plato, to be sure, in contrasting practical to pure knowledge makes something very like our modern distinction between the so-called "empirical" sciences with their approximate, descriptive laws and the exact sciences with their necessary, prescriptive ones.[138] But the only sciences that count for him are the exact sciences, the only laws worthy of the name are the Forms of true being. And here, in his opinion, the science and the laws of human conduct belong beyond doubt.

Furthermore, Plato seems to have seen that the measure of the exactness of a science is the possibility of expressing in mathematical formulae the laws it discovers. In dealing with the *Republic* we had occasion to note the early growth of

[138] *Philebus,* 55 C–59 D. I dodge here, of course, the modern question whether even the laws of mathematics can be called necessary, and whether all science is not empirical and approximative only.

Plato's interest in mathematics. Indeed, we saw him in that dialogue already insisting upon a thorough study of the subject as an indispensable preparation for rising to the vision of the Ideas and of the Good. Now we find that this interest has become a veritable passion and the source of a great hope. Just as the vistas opened by the mathematical revival of a later day spurred on Descartes and Spinoza to attempt a sort of geometry of metaphysics, so Plato was bitten by the idea that the method of mathematics might be universally applied. For that matter, as we shall soon see when we come to the metaphysical implications of the *Philebus*, it looks as if he were beginning to voice articulately the feeling that the Forms themselves, so far as they satisfy the desire to know, must be regarded as essentially mathematical formulae. That point must wait till later, concerned as we are at present only with the moral aspect of the dialogue. Suffice it to say for the moment that Plato is seeking what we should call a "scientific" ethics, or in other words the exact determination and statement of a rule of right behavior and of a recipé of happiness "good" for all individuals and states. In the *Republic* he had defined justice as a *harmonious* working together of the different parts of the soul, and let it go at that. Now he is trying to find a formula to tell us once and for all what that harmony is. And this he is doing by the use of the mathematical method. "Limit," as one critic has said, "means specifically determined mathematical ratio." [139] Applied to the springs and ingredients of human conduct, it should yield, Plato feels, the exact fractions to be assigned to the various factors in the sum of the total moral good, and should enable us to conceive harmony and justice as an arithmetical proportion. In a word, inspired by his growing confidence in mathematics to solve all problems, he is trying to recast his ethics *more geometrico*—in geometrical form.[140]

We may note also, at the risk again of forestalling a point that will arise later, that in a contemporay dialogue, the *Statesman*, Plato applies the mathematical doctrine of measure to politics. There he maintains that the "excellence or beauty

[139] Taylor, *Plato*, p. 417.

[140] Jaeger, *Aristoteles*, p. 87; *cf.* Stewart, *op. cit.*, p. 94.

of every work of art is due to the observance of measure," [141] and that a really scientific form of government, such as could be instituted by an all-wise king, would entail an accurate balancing of different temperaments and an interweaving of antithetic virtues in due proportion.[142]

Further discussion of the increasingly grave and acute mathematical accent in Plato's thought we must leave to a future chapter. But we shall find predictions of it also in his treatment of knowledge, to which we are about to turn. And by having made this excursion into the future in ethics and politics we shall perhaps be able to deal more intelligently with the Platonic epistomology.

That we can no longer avoid or postpone a discussion of this rather difficult field must be obvious. We approach it, indeed, under a double compulsion. In analyzing love we were continually forced to borrow terms from the sphere of reasoning and knowing, and upon the place occupied in Plato's ethics by thought and wisdom we have no need to dwell. The basis of right action for him, as for Socrates, is knowledge of the good. And he feels that he has gone beyond his master by discovering through the use of reason and logic what that good is. Moreover, he could scarcely attempt to apply the mathematical and scientific method in the ethical sphere without having first studied its bases and nature. We, however, have been so far accepting without much question the activities of thought and reason, and words like "truth." We can do so no longer. We must find out what they are like, and what is the mark of this "truth" of which they profess themselves to be ever in search. Let us apply ourselves, then, to the question—what is knowledge?

141 *Statesman,* 284 A.

142 *Cf.* Robin, *La Pensée Grecque,* pp. 263 ff.

## CHAPTER VII

## PLATO'S THEORY OF KNOWLEDGE

### I

As we have seen, the equivocal and intriguing glances cast by the passing show of events upon their audience as they troop down the stage have an appeal other than that of beauty or of virtue. There is a "come hither" look in the eyes of the most respectable and the homeliest datum of sense, and on the face of all of them there plays a Gioconda-like smile which suggests that they are at the same time more than they seem and not all they ought to be. It is in this enigmatic look which fires the primitive wonder and curiosity about the world that the process of knowledge begins. We find ourselves at the same instant both perceiving sense-data and instinctively interpreting what we perceive.

Now many people, Plato feels, do not get very far with their interpretation. Their perceptions look to them, indeed, as if they came from the outside and were somehow fairly reliable pictures of a world of external objects. But the line between fact and fancy is vaguely drawn. Images are frequently confused with their originals and dreams mistaken for realities. We cherish illusions and are taken in by misrepresentations. We shy at shadows and growl at reflections in a mirror or stream. In a word, many of us dwell in a state of semi-bewilderment, or as Plato calls it, of vain imaginings and random guesses.

There are, however, harder heads who are not so gullible. Such people know when they are caught napping and when they are awake, and can tell a dream or a fancy from a so-called fact. And they are able to discount what is told them in the light of what they perceive with their own eyes. Seeing with

them is believing. Their world, then, is a reasonably cold and objective affair. It goes on of itself out there, a troop of independent, external things, animate and inanimate, quite oblivious to our gossip and prejudice and illusion, and only the impressions that bear its label are regarded as trustworthy. This more robust and better instructed type of experience, with its clearer distinction between the subjective and the objective, exhibits, to use a Platonic term, assurance rather than bewilderment in dealing with its data. Its grasp on things is more certain, its manner more convinced. It has developed a kind of *savoir faire*, and its thoughts and acts are not without a certain worldly wisdom.

Still, this state of mind is far from being true knowledge. For, even when we have distinguished the data that mean an external world from those that do not, we have by no means obtained a handhold on anything that, on second thought, we can call Reality. Facts, we soon discover, are as many, as various, as conflicting, as shifting and passing, as fancies. We are, perhaps, no longer being rolled over and over in a Protagorean stream of purely subjective sensation which seems true one moment and false the next. But the objective world on which we now think we have a grasp turns out to be little better. It, too, is an unmitigated Heracleitean flux, lawless, unstable, and unreliable, and its motley flotsam and jetsam of events and objects have no coherence and order of their own. And the distinction between truth and error, fact and fancy, acquired through empirical—and bitter—experience, which enables us to keep our heads above water and swim with some success, is after all derived from mere provisional and half-baked rules of thumb. At this stage in the game we are like the lover whose eye is caught by the beauty of this or that, but lacks perception as yet of the single nature and principle of beauty that makes his various loves attractive.[1] Or, to concoct a modern illustration of our own, we may suppose ourselves threading a precarious way through crowded city streets full of darting taxi-cabs and flanked by buildings under rapid and careless construction. We have learned by observation and accident

[1] *Rep.*, V, 479 E.

the objectivity and the danger of speeding cabs and falling bricks, and have worked out rough and ready means for dodging them that assure us fairly well against mishap and enable us to go about our business with confidence. But we are still ignorant of the physical laws governing the behavior of moving bodies—as for example, gravitation, acceleration, the equality of action and reaction and of the angles of incidence and reflection—which make our rules of thumb effective and justify our assurance.

At the same time, this state of mind cannot be dismissed as ignorance pure and simple. Even random guesswork and the muddling of fact and fancy can scarcely be called that. For unadulterated ignorance would be a sheer mental blankness without the faintest glimmer of knowledge in it, too vacuous even to perplex or to confuse us. We cannot speak of it as having, like knowledge, an object, since it is wholly negative, but we might say that it has a kind of counterpart and pseudo-object in "not-being." By this, however, we do not mean that the absolutely ignorant person—if such could be found—would be unconscious. Appearances would still swarm before his eyes, but they would be wholly meaningless to him. They would give no hint of an objective world, and would arouse no suspicion of a reality behind phenomena. Neither would they carry any suggestion of ideas or general concepts, or afford any ground for inference. For that matter, they could never clot together into "things" and make names for themselves, since "things" and names are the beginning of wisdom. And terms like "being" and "existence," which are also rather sophisticated, could not be applied to them. Literally, then, to the completely ignorant man the flux of sensation would look like no thing and no being,—in other words would be, as Plato says, "not-being." [2] The wildest guess, however, is about something. It is more than the appearance that excites it. It is a meaning that the appearance possesses, and is an inference of sorts. It is aimed at "being," and, though it may fly wide of its particular mark, its general direction is towards truth. And the most hopeless muddling of fact and fancy implies that

[2] *Ibid.*, 477 A.

a distinction between appearance and reality, no matter how crude and ill-drawn, has suggested itself to the mind.

These two stages, of guesswork and the greater assurance of rule of thumb, which are a mixture of ignorance and knowledge and lie intermediate between them, Plato calls *opinion*.[3] The object of opinion is correspondingly a mixture of "being" and "not-being" and hovers midway between them. It is a world composed of appearances partially rationalized but as yet incompletely understood—in other words, the familiar work-a-day, material world in space and time, in which all sorts of things are continually passing into and out of existence, or in the Platonic phrase "becoming." In it universal and permanent natures and types and laws are seen intermittently and confusedly through a medium of change and multiplicity. Nothing is absolute and clear-cut in the picture; everything is relative and shifting. One and the same form is reproduced again and again with wearisome reiteration in a host of imperfect examples. And in one and the same concrete thing a host of forms overlap and supplant one another. What looks beautiful one moment looks ugly the next. What seems just to you seems unjust to me. What appears light or small relatively to one thing looms large and heavy in relation to another.[4] We are still, then, in the Sophists' quandary. We can say of our world "it seems," "it looks as if," "it is my opinion that," but we cannot say as yet "it is," "I know."

It is impossible, however, for a thinking man to remain complacent in this quandary for long. Willy-nilly, he is forced sooner or later to find reasons for his opinions, no matter how well borne out by common experience and consent they may be. It is a sound and practical opinion, for example, that bricks fall straight down. But we have now also to ask ourselves, or are asked by others, why they fall rather than remain suspended in the air, and fall as they do instead of obliquely or in spirals. Or again, we can do sums in addition quite correctly on our fingers and measure off and lay out a plot of ground with a knotted string. But, at the same time, we are led to wonder about the nature and relations of num-

[3] *Ibid.*, 478–479.

[4] *Ibid.*, 479.

bers and geometrical figures which render our rough methods feasible and our results tolerably accurate. That is, we begin to *think through* the situation—as Newton did, for instance, when he saw the apple falling—and to see the abstract properties of mathematical entities and the general principles that underlie the behavior of all moving bodies. Or, we might say, we are now getting at the rational form and structure of the phenomenal world and reaching an *intelligent understanding*, as Plato calls it, of the why and wherefore of things.

But the edifice of knowledge still lacks its coping. The method of the arithmetician and the geometer, which for Plato is the supreme example of *understanding*, falls short in two respects. In the first place it has not altogether dispensed with sense and imagery, for it still employs formulae, equations, and diagrams in setting forth its theories and demonstrations. The mathematician uses them, to be sure, as mere symbols and aids, and sees through them clearly enough to the abstract mathematical truths which are the real objects of his thought. But at the same time he leaves standing at the level of sense such characteristics of his figures as do not bear directly upon the subject at hand. From the white lines, for instance, that he draws upon the blackboard he does not bother to deduce the universal forms of whiteness, and length, and breadth, and chalk, and the like, but only the abstract nature of triangularity. And by leaving these other qualities unreduced to their proper types and allowing them still to appear to the eye rather than to the mind, he introduces a pictorial element into his demonstration. In other words, he is not yet grasping mathematical truths in complete abstraction from sense-data. He is seeing the image of a particular triangle at the same time that he is thinking of the universal properties of triangles in general. Again, to choose an example of our own, the biologist, in using the guinea-pig to exemplify the Mendelian law of heredity, does not refer all its characteristics to the types and laws of which they are instances, and analyze the entire animal into a system of interrelated concepts—of blackness and whiteness and hair and bone and blood and the like. He simply abstracts such aspects as illustrate the truth in

question, and leaves the rest of it a particular object running about squealing in the world of phenomena. His scientific interest, like that of the mathematician in the figure of the triangle, is not all-inclusive and all-dissolving. To put it in more general terms, the sciences are selective. None of them ever takes a universal point of view and tries to relate its particular field to the fields of the other sciences and to Reality as a whole. Hence each ignores many aspects of the universe, which remains, so far as it is concerned, an unresolved and indigested mass of sense-data.

In the second place, the sciences do not any of them, in Plato's opinion, ever really get down to bed-rock. The starting-points they select are not first principles but derivative concepts. For instance, the geometer assumes the ultimate character of the axioms and postulates upon which he bases his theorems, and the astronomer in developing his celestial mechanics does not seek to go behind the presence of heavenly bodies moving in space. Or, to choose more modern examples, the biologist regards life, and the psychologist has until recently looked upon consciousness, as an irreducible fact so far as the purposes of his science are concerned. But these starting-points are by no means final concepts; witness the development of non-Euclidian geometry and the Einstein theory, and the contentions that consciousness and life are modes of mechanical energy, or conversely that the whole physical and mechanical world, even down to protons and electrons, may be reduced to terms of consciousness pure and simple and regarded as existing only in and for a mind. In short, we find that the sciences are all accepting as first principles postulates that are really open questions, and are constructing their hypotheses upon grounds that are themselves a secondary and shaky stratum of Reality.

If, then, the desire to know the whole truth about things is to be fulfilled and knowledge is to attain its goal, both these shortcomings of *understanding* must be supplemented and rectified. No sensible qualities in the particular object can be passed over and left standing. Every concrete object has to be rendered intelligible through and through by being un-

ravelled into the various abstract forms and natures that lie snarled and knotted there. The guinea-pig must be resolved into all the general types and laws of animal psychology, organic structure, bio-chemistry, matter and motion, and the like, that feature in it. And the triangle on the blackboard must follow suit. Every minutest item and shyest aspect in them, and in every other incident in the flux of sense, must become so transparent that the eye of reason sees through them, undistracted by speck or flaw, to the universal principles that underlie phenomena. And then the mind's eye must strain further and further back through these principles themselves, seeing in them instances of more inclusive types and laws and grouping them under ever wider and deeper generalizations, until finally it reaches some all-comprehensive and all-explaining first principle from which the whole system may be logically deduced.[5] In short, we must now *reason* out by the exercise of pure logic a *philosophic* theory of the nature of Reality as a whole that will unify and systematize the premises and concepts of the sciences, in the same way that scientific hypotheses organize and explain their appropriate sense-data. This purely logical power of the mind, by the exercise of which it soars from the axioms and the results of the sciences "to the first principle of the whole; and then clinging to this and to that which depends on this, by successive steps . . . descends again without the aid of any sensible object from ideas, through ideas, and ends in ideas," [6] is called by Plato *dialectic*.[7]

To illustrate this gradual and continuous ascent from complete ignorance towards perfect knowledge [8] Plato uses two figures, the simile of the divided line and the allegory of the prisoners in the cave. Take, he says in the first figure, a line and cut it in two, and then subdivide in like manner both of the resulting sections, making four divisions in all. The two main sections represent respectively the visible and the intelligible, the data of sense and the objects of thought. The

[5] *Rep.*, VII, 531 D.

[6] *Rep.*, VI, 511 B.

[7] *Ibid.*, 511 B. *Cf.* VII, 31 D ff. For a discussion of the four stages of development, *cf.* Nettleship, *op. cit.*, ch. XI.

[8] *Cf.* Nettleship, *op. cit.*, p. 238.

first subdivision of the section of the visible stands for the images, shadows, and reflections that come to us helter-skelter through our senses and make up our perceptual experiences. The other segment symbolizes the objective, outer world, of which we soon come to regard our perceptions as copies or resemblances. Passing now to the intelligible world, we find that the first subdivision there stands for the forms and laws discovered in phenomena by the sciences, but not yet completely reduced to a single first principle or wholly divested of the images of the things to which they apply. And the other subdivision represents the whole world of Forms interrelated in a single system and subsumed under a single all-comprehensive and all-explaining Idea.[9] Corresponding to these four divisions are the four faculties of the soul with which we have just been dealing—imaginings and guesses, assurance and *savoir faire*, understanding, and pure reason, which form an ascending series in mental clearness in the same degree that their objects have truth.[10]

Or again, let us suppose prisoners chained in an underground den, unable to turn their heads.[11] Behind them a great fire blazes in the distance, and between them and it there is a low raised walk along which porters are forever carrying all sorts of figures and images of the animals existing on the surface of the earth. All that the prisoners can see are the reflections cast upon the wall in front of them by the images, and the conversation of the porters comes to them in echo as if it were the talk of the passing shadows. To them then all truth and reality would be nothing but the shadow of an image. Now turn the prisoners round and what will happen? They will be dazzled by the glare of the fire, and for a time they will be unable to see the figures that have been casting the shadows. And when they do, it will be hard work to convince them that these figures are more true and real than the shadows, and that the sights to which they have been accustomed, and to whose dark sil-

[9] *Ibid.*, 508 D ff.

[10] *Rep.*, VII, 511 D ff. I have here followed Nettleship's interpretation of the "divided line." His view, however, is questioned by Stocks (*Classical Quarterly*, V (1911), pp. 73 ff.) and Ferguson (*ibid.*, XV, 1921).

[11] *Ibid.*, 514 A ff.

houettes the half-blinded eye turns back for rest and relief, are mere illusions. How much more dazzled, then, and pained a prisoner will be, if he is dragged up to the outer world and confronted with the real objects of which the images are copies, and is forced even to lift his eyes towards the sun whose light reveals the nature of these objects, their relations to one another, and their proper place in the world. A long habituation and training will be necessary. At first he will see shadows, then reflections, then the objects themselves, then the heavens by starlight and moonlight, until finally he can bear the radiance of the sun. The traditional application of the allegory is as follows. We are the prisoners, the cave is the visible world, the images are material objects, the fire is the physical sun whose light enables them to appear and us to see. The upper world with its "real" objects is the intelligible realm; the originals of the images are the Forms or Ideas. And the sun corresponds to that first and final principle, "The universal author of all things beautiful and right, parent of light and of the lord of light in the visible world, and the immediate source of reason and truth in the intellectual," [12] whose existence has been already implied by the insufficiency of *understanding* and by the need of supplementing and capping the sciences with dialectic or philosophy.[13]

This principle, which forms the culminating peak of the Platonic system, we are now in a position to scale. We may approach it from the side both of the Ideas and of our reasoning process. Let us start from the Ideas. Particular objects, as we have seen, get a nature and a name and become describable things by virtue of displaying a type or law of some sort and having a definite Form. The indefinite expanse, then, of sensible particulars converges upon a higher range of general concepts which cast their shadows upon every individual detail. But now, arguing by analogy, we might expect these general concepts in their turn to converge upon some central Idea which transcends and overshadows them all, just as each Form

[12] *Ibid.*, 517 C.

[13] For another interpretation of the allegory of the Cave, *cf.* Ferguson, *Classical Quarterly*, XVI, 1922.

transcends the mass of phenomena that embody it. In other words, just as all individual men, however unlike, are examples of human nature, so all Forms, however different, exemplify the nature of Form in general.

Furthermore, we shall find the nature of Forms, as we find the nature of any class, by discovering their common characteristic. The Forms, we see, for all their variety, are at one in the identical work they do of unifying, defining, and making coherent and comprehensible the phenomena to which they apply. All of them satisfy the desire to know, are principles of explanation and termini of thought, and bear the stamp and value of truth. To be a Form is to explain, to make clear, to hold good for things, to validate reasoning. The quality, then, common to all the Ideas we may sum up as satisfactoriness or goodness for thought, or in other words, as *intelligibility*. Hence it seems quite *à propos* that this principle of intelligibility which is the supreme object of knowledge, and which gives essence and being to all the Forms, even as each Form gives essence and being to a class of particular objects,[14] should be called by Plato the Idea or Form of the Good.

Further light is shed upon the nature of this principle if we approach it through the aspirations of reason. What is it, we may ask, that proves wholly good and satisfactory to thought and in which reason comes to rest? The answer is:—the complete coherency and unity of their object. Reasoning, as Plato points out, declines to be brought to an end until the Forms, with which the many, one-sided sciences content themselves and stop, have been dovetailed like the parts of a picture puzzle and combined in a single connected system—a Form or plan of the universe as a whole. And it is just the fact of the Forms looking as if they could be fitted into one another and belonged to one and the same picture that gives them their goodness for thought and their truth-value. Isolated and unrelated, they would derail thinking and bring the scientists to a full stop—the chemist in his particular laws and concepts, the physicist in his, the psychologist in his—with no hope of prolonging the line and proceeding to the same ultimate des-

[14] *Cf.* Robin, *La Pensée Grecque*, p. 232.

tination. If, for instance, the law of gravitation could not be brought into accord with the other laws of motion, it would set rather than solve a problem, and block rather than aid our attempt to comprehend the behavior of moving bodies. Or again, no matter how well the concepts of physics, chemistry, biology, psychology, ethics, and the like may work in their respective fields, we remain suspicious of them and feel that there is a screw loose somewhere, unless they can be geared together. In a word, if the Forms are to be really intelligible, they must, in Plato's eyes, intercommunicate, and the understanding of one section of the universe must help unlock the door to the understanding of another, till all are eventually thrown into one. Otherwise, as a litter of fragmentary and incongruous items of knowledge about the world, of which we can never even hope to make head or tail, they simply put a final stamp of irrationality upon the universe and proclaim it an unintelligible jumble.

The Idea of the Good, then, whatever else it may be to Plato, emphasizes and gives substance to the fact that the types and laws exhibited in experience are features of a larger all-comprehensive unit, which we may call the Nature or Form of Reality as a whole. It is only, Plato feels, in the light of such a unity that the Ideas can appear as principles of explanation, mean truth to us, and render things intelligible. Moreover, since a type that will not apply or a law that will not hold is good for nothing and equivalent to nothing and not really a type or law at all, we may say that without this unity the Forms cannot even be said to exist. And finally, since the terms "truth" and "existence" denote a complex system of many types and laws, they are not perhaps terms to be used of that essential *oneness*, abstracted from the things it unites, which is the source of the intelligibility of the concepts of the special sciences. It may be that the principle of unity in the world of Forms would be better described as above or beyond truth and existence. For the Form of Reality as a whole must transcend all real beings in the same way, for example, that the Form of man transcends all human beings.

With so much in mind we may the more readily understand a magnificent passage in the sixth book of the *Republic* in which

Plato develops at some length the analogy between the place and function of the sun in the visible world and the position of the Idea of the Good in the intelligible order. Just as the eye must have light in order to see the objects in the visible world, so the Forms, he tells us, must receive a kind of intelligible illumination in order to be grasped by the soul. In the visible world it is the sun that is the author at once of sight in the eye and of visibility in the physical object. In like manner, in the intelligible sphere it is the Idea of the Good that imparts intelligibility and "truth to the known and the power of knowing to the knower." Again, just as the sun is neither the eye nor the visible object, but is higher than both, so the Form of the Good is neither knowledge nor truth, but is superior to either of them. "As . . . light and sight may be truly said to be like the sun, and yet not to be the sun, so in this other sphere science and truth may be deemed to be like the good, but not the good; the good has a place of honor yet higher." Finally, just as the sun on high is the author not only of visibility but of life and growth in the material world, so the Idea of the Good is the author not only of the knowableness but also of the very being and essence of the Forms, although itself is not essence, but is far beyond essence in dignity and power.[15]

In describing the final effort of philosophy by which the mind faces with unblinking eye the sun of the Good and beholds the underlying unity of all Forms and types and laws, Plato turns mystical. Dialectic is, he seems to feel, a counsel of perfection, something beyond the power of our finite minds, at any rate so long as they are imprisoned in the body.[16] If we were capable of it, perfect and absolute knowledge would be here and now within the grasp of man—which it is not. We can never render the veil of sense absolutely transparent and see the truth stark naked and with the mind's eye alone. Nor can we ever completely organize the assumptions and results of the different sciences into a single intelligible scheme and achieve a philosophic system that reduces all the different aspects of the truth to unity. Moreover, the vision of all time

[15] *Rep.*, VI, 527 A–509 D. *Cf.* on these passages Ferguson, *loc. cit.*

[16] *Cf.* Nettleship, *op. cit.*, p. 254.

and existence reduced to pure and perfect unity is something that seems to transcend for him even the highest flights of abstract reason. It is attained, rather, in a kind of mystical intuition, and it is attended by an ineffable ecstasy like that in which love yields itself up and loses itself in the great sea of absolute beauty. And the attainment and enjoyment of it involve a change of experience and attitude akin to that of a religious conversion. The prisoner in the cave could only turn his eye to the light if his whole body were turned around. "So, too, it is only by a movement of the whole soul that the instrument of knowledge can be turned from the world of becoming to that of being, or in other words, of the soul." [17] In short, we are apparently dealing with a kind of Beatific Vision, the equivalent of the religious mystic's vision of God.[18]

Still, this final act of perfect knowledge or intuition in which the mind, turning its attention from the world of sense and beginning, as it were, a new life, contemplates the truth, the whole truth, and nothing but the truth, and unites itself with the very Form of the universe, is, whether or not it is attainable, the goal after which all thought really yearns and strives, and, falling short of which, feels itself balked and unfulfilled. In other words, like love and right conduct, knowledge is aimed at the eternal, and only in reaching the eternal can it find its "other half," its satisfaction, and its peace. Like them, too, it rescues the soul from the flux and makes her immortal in the deepest sense of the word, adjusting point by point the focus of her attention upon a timeless object, rendering her progressively oblivious to the roar and rush of change and becoming which surround and shake her bodily habitation, and infusing her experience with the quality of eternity. We may say, of knowledge, as of love and moral goodness, that it is the intimation of a changeless and immaterial Reality upon the existence of which its validity depends. If there is no such being, and the flux is all there is, then the message is meaningless, the desire to know which drives men on is a vain desire, and the labors to which the love of truth incites are labors lost.

[17] *Rep.*, VII, 518 C. Jowett's trans. adapted.

[18] *Cf.* Wilamowitz-Moellendorf, *Platon,* I, p. 421 *et seq.*

The Platonic theory of knowledge, then, confirms the message of the Platonic ethics, and taken together they enable us at last to understand the full significance of the situation that confronted us at the very beginning of the chapter. There, we may remember, when we stood looking down at the stream of time and change we noted that the surface of the flux was everywhere broken by unshifting and persistent eddies which deflected its swift, oily current and twisted every drop of its formless substance into exhibition of a form and obedience to a law. Those eddies have now grown into waterspouts everywhere whirling upwards to unite with tremendous shapes of overhanging cloud. For, the particles that become individual things and members of a class of some sort when they begin to swirl about this or that point of arrest in the current, are not wholly immersed in time and change and do not remain wholly upon its level. They are caught upwards into another world. Or rather they are a fusion of the two worlds of being and becoming, to use the Platonic phrase, and in each one of them, however humble, an aspiration of the temporal towards the eternal is met by a condescension of the eternal to the temporal. And they are held and steadied in their momentary outreaching and uprightness, not by any rigidity in their base, but rather by a suction, as it were, from above. The great mass of things are sustained in the waterspout but an instant, and most particular objects, relinquishing their contact with Form, sink back and are dissolved in the waters of the flux. But it is the privilege and dignity of a thing like man, endowed with soul and reason, and conscious of his nature, to suck the liquid stuff of sensuous experience up into the clouds forever and assimilate it to their ethereal shapes and essence. Lifting our hearts and minds out of the bewildering gyrations of the body and the senses, and being caught up and sustained by the love and knowledge of true being, we may retain our contact with the heavens—so that when the body and the senses are reclaimed by the flux, we may still, if only our absorption in truth and beauty and virtue has been sufficiently complete, be gathered up altogether from time and change and depend from the eternal.

## CHAPTER VIII

## THE PLATONIC IDEAS

### I

We are now convinced that the flux of sense and matter in time and space is not all that exists—nay, that it is but a minor aspect of Reality. Its seeming solidity proves so thin and translucent that, whenever we approach it, we always see through it to a realm of fixed, immaterial Forms—qualities, values, types, laws and the like, whose persistent outlines give it all the stability and pattern and meaning it possesses. The characteristic features of these haunting presences we have probably already pieced together. We have doubtless recognized in them our old friends the Socratic general concepts—the universally agreed upon definitions extracted by reiterated question and answer from the conflicting opinions of the multitude. But whereas the Socratic definitions—unless, indeed, we are to credit Socrates with the Platonic theory of Forms—were merely the ideas people had in mind, and what people really meant, when they talked of this, that, or the other, the Platonic Forms were these ideas turned into eternal truths existing independently of the mind. For example, from a comparison of many instances of moving and falling bodies we may sift out a formula that covers every case and arrive at a Socratic general concept. And then we may come to feel that this formula is an objective law that would hold good, would be true, would exist, even if there had never been any minds to discover and entertain it. And even if there were no bodies to enact it, we might still hold that it would exist as a possible or even necessary way in which any physical universe might or must behave, if one ever came into existence. In that case we should have passed from the law of gravitation regarded as a

mere Socratic description or definition to the law regarded as a Platonic Form or Idea.

Again the rigidity and precision of these Forms or Natures of things gives them a mathematical austerity, and we might see in them versions, expanded and extended into the field of logic, of the Numbers of which the Pythagoreans thought that all things were composed—especially when we remember that the Pythagorean numbers were conceived not arithmetically but geometrically, as configurations or patterns of the things in question. And we cannot but be reminded, also, of the Heracleitean Logos, or eternal order inherent in the flux, which in the Ideas we find given greater specification and plotted out into a community of interrelated essences. Finally each Form is itself and no other, and is therefore simple and uncompounded. No beginning or end can be ascribed to it, since it would be as foolish to ask when the gravitational formula became a possible description of the movement of bodies, or when the equality of the interior angles to two right angles began to exist, as it would be to ask when being began to be. And this absolute, unalterable, timeless character of the Forms repeats many of the features of the Parmenidean One and of the Eleatic-Megaric Being.

All these strains are blended in Plato's own description of the Ideas, which we will now sum up. The Forms are, we are told, eternal. They are not rusted or worn away by the processes of change which wreak such havoc in particular concrete objects.[1] They are free from any taint of sense or imagery,[2] invisible to the eye, apprehended only by the mind.[3] They are universal, valid always and everywhere.[4] They are ever the same, self-identical and self-existent, absolute, separate, simple, and without beginning or end.[5] They are complete, perfect, existent in every respect.[6] In short, in contrast to the

1 *Phaedo,* 78 D–79 C. *Symposium,* 211 A.
2 *Phaedrus,* 247 C.
3 *Phaedo,* 79 A.
4 *Rep.,* X, 296 A. *Cf.* Aristotle, *Met.,* I, 9, 990*b*, 6 ff.
5 *Phaedo,* 78 D–79 C. *Symposium,* 211 A.
6 *Phaedrus,* 247 C–E. *Rep.,* VI, 493 E, 507 B, X, 597 D. *Phaedo,* 65 D, 78 D, 100 C.

shifting, impermanent, multiple world of sensible objects they bear all the earmarks of true being. They are the real essences of things, the only genuine existences, the things that really are. Moreover, as we have lately seen, taken altogether, they fit into one another and form one interconnected Whole—so that their different splendors seem to radiate from a single principle, a common denominator, present in them all, the essence of all the meanings and values present in the world. And this essence Plato seems to elevate into a separate and supreme Idea, a Form of which all other Forms are particular instances and partial aspects.

Let us now press on to explore this Rome to which all roads lead. Two questions are perhaps uppermost in our minds. How big is it, and of what stuff is it built? In other words, what is the extent of the world of Forms or Ideas, and just what kind of existence does Plato attribute to it? Both are important and disputed problems, but the question of its size is more quickly disposed of. We begin then with that.

So far as we can judge from the dialogues with which we have been dealing, no limit is set to the number and kind of Forms. Wherever two or three phenomena are gathered together under a single name, there a Form is present also, so that there are as many Ideas as there are possibilities of grouping things under headings and applying to them a common term.[7] More specifically we find Plato mentioning Forms of all sorts of qualities and values of the most heterogeneous sort, moral, aesthetic, and physical. Thus we have virtues like temperance, courage, liberality, and magnificence;[8] aesthetic values like beauty;[9] physical qualities like health and strength,[10] color, shape, and sound,[11] swiftness and slowness.[12] Also, there are Ideas of natural objects,[13] and of artificial objects such as beds and tables;[14] of categories and relations such

7 *Rep.*, X, 596 A.
8 *Rep.*, II, 402 C.
9 *Cf.* the *Phaedrus* and the *Symposium.*
10 *Phaedo*, 65 D.
11 *Cratylus*, 423 E.
12 *Rep.*, VII, 529 D.
13 Aristotle, *Met.*, XII, 3, 1070*a* ff.
14 *Rep.*, X, 596 A.

as sameness and difference, equality, greatness and smallness;[15] and even of evil and negative things.[16] But the scattered and diverse character of these references does not necessarily betray any confusion or diffuseness in Plato's thought. It is simply that at every turn the universe meets our demands upon it for rationality and order, and that wherever we look we find nothing that is not food for thought and capable of incorporation in the body of truth.

Plato, however, does not seem to have made himself wholly clear even to his contemporaries on this point, for we find Aristotle accusing him of having arbitrarily excluded from the realm of Forms Ideas of artificial objects, negations, and relative terms. And a recent commentator[17] has raised the question whether in the later dialogues Plato did not shed the Ideas not only of relations, negations, and artificial objects, but of everything except natural species. The latter view, however, has been vigorously combatted and is not generally accepted. And Aristotle's criticisms have been examined and so explained as not to conflict with the Platonic assertions.[18] We may, then, having noted these differences of opinion, leave the point to one side.

The other problem, that of the precise kind of existence attributed to the realm of Forms, is much more intricate and is at the moment much debated. The gist of it is whether the theory of Ideas is a logic or a metaphysics; that is, whether Plato attributes to the Forms the kind of existence possessed by a law of nature or a true proposition, or the kind of existence we attribute to a God.

The metaphysical interpretation has been in vogue from the time of Aristotle down to the present day. Aristotle inveighed against his master on the ground that he merely reduplicated the world of sensible objects on a divine, gigantic scale, remarking that just as the Gods of popular mythology were nothing but eternal men, so the Forms were nothing but eternal sensible *things*. For, after all, the man-in-himself, or horse-

15 *Rep.*, V, 454 A–B. *Phaedo*, 100 E.

16 *Rep.*, III, 402 C. V, 475 E–476 A. *Cf. Parmenides*, 129 D–E.

17 Jackson.

18 *Cf.* Robin, *Théorie Platonicienne*, ch. III, pp. 173 ff.

in-itself, or health-in-itself of which Plato talks is just like the particular man or horse or instance of health, except that it is imperishable and eternal whereas the particulars are perishable.[19] Again, Aristotle tells us, Plato attributes substantial existence to general concepts, thereby turning them into individual objects—which is a contradiction in terms and absurd.[20] In other words, according to Aristotle Plato conceived the Forms as quasi-concrete beings, existing of themselves in a kind of philosophic heaven—metaphysical models of what goes on in the flux, laid up in a celestial show case.

It must be admitted that there is much in Plato's phrasing that invites such an interpretation. The essence of absolute beauty towards which love yearns, the universal and changeless principles that dominate all moral life, the immutable types and laws in which the scientific interest in understanding the world comes to rest, and the final vision of Reality as a single intelligible whole, or in other words, the Form of the Good:—all these are constantly spoken of as if they were what we should call Gods of sorts, immaterial yet concrete and potent beings endowed with every perfection, displayed in the world of sense yet existing independently of it. And this probably is the notion we have gathered of them at the moment.

Moreover, if we repeat our old trick of seeking to evolve Plato out of our own experience, there is much in the result to favor this view. Suppose, for example, we try to analyze what we really have in mind when we entertain a general concept. We find at once that it is impossible to attain complete abstraction in our thought. Strive as we may, there always remains a tiny, inextinguishable core of imagery at the heart of every universal. No matter how scientifically, universally, and abstractly we may seem to ourselves to be thinking of man-in-general, or temperance-in-general, or smallness-in-general, our idea is ever on the verge of coagulating into a blurred, fleeting picture of a particular man, or a specific instance of temperance, or something small, which becomes a sort of symbol or nucleus of the abstract concept. But images and pictures are

[19] Aristotle, *Met.*, III, 3, 997*b*, 8 ff.
[20] *Ibid.*, 6, 1003*a*, 7–13; VII, 16, 1040 B, 23–29.

sensible and concrete, of things, not of abstractions, and they are fringed with space and time and materiality. Plato, to be sure, is aware of this inclination of ideas to condense into images, is on his guard against it, and seeks to clear his Forms of every trace of sense. Still, it would not be surprising if this ineradicable tendency of thought were too much for him. He could not think of his Ideas without picturing them, he could not picture them without making them *things*. And even if the picture were deliberately suppressed, it might, like the Cheshire cat, leave its smile behind it pervading the abstract concept with a subtle warmth and flavor of concrete existence. Merely as objects of knowledge, then, the types and laws and values discovered in the sensible world might detach themselves from it, envelop themselves in a kind of astral body of their own, and become the doubles of the phenomena they described.

But there is more to the matter than this. Plato, like most of us, was inclined to think of the type not as an average but as a standard. His Ideas turned into ideals. The typical cow was not a grade but a pedigreed nature. Horse-in-general was not any old nag but a thoroughbred. The Form of man was an idealized portrait, not a composite photograph, of human nature. Health-in-general was not ordinary but glowing well-being. In short, the Forms were typical in the sense that the breeder of stock or the dog-fancier uses the term. They possessed all the prize points that we would like to see incorporated in the individual. They were beautiful and good as well as true; or rather, their truth and beauty and goodness flowed together to form a single indissoluble perfection.

Now the moment that an abstract idea is charged with moral and aesthetic values and turns into an ideal, it becomes, to put it paradoxically, nothing but a concrete example of itself. It is practically all picture. Our love and reverence for an idea attach themselves not to what is abstract in it but to its core of imagery, thanks to which alone it can become a "vision." When we profess ourselves willing to die for the idea of freedom, for example, it is not for the definition of liberty in the dictionary but for all the concrete things liberty means to us that we are ready to sacrifice ourselves. Or again, my observa-

tion of human nature may result in a general formula, but when I exhort you to be a man, it is not that formula but an image of the paragon I would have you be that floats before my eyes.

In a word, if even the most abstract truth tends to be thought of concretely and to become a *thing*, the tendency is multiplied a hundredfold in the case of goodness and beauty.[21] And we have only to let ourselves drift with it to find ourselves in the world of Platonic Ideas. The thing-like feel imparted to general concepts by their core of imagery, especially when it is loaded with moral and aesthetic values, assumes metaphysical weight and gives them a kind of immaterial substantiality not unlike the "spiritual" being we commonly attribute to God. At the same time, their abstract natures, their changelessness and universality, and the halo of perfection that gathers about them exalt these "spiritual" entities high above the material world and turn them into "ultimate realities." [22]

Taken all in all, then, there is a good deal not only in the Dialogues but in the workings of the human mind to support what we might call a "two-story" interpretation of the Platonic theory, and the Ideas have generally figured in the history of philosophy as self-existent, quasi-divine, metaphysical beings, bright and perfect archetypes of the gross things of earth, the only true realities, laid up in a heaven of their own and only incidentally reflected in the broken and dissolving images of the flux.

Moreover, this metaphysical filling of the immaterial concreteness injected into things like types and laws and values, which makes them self-enacting and self-supporting, involves us inevitably in a dualistic theory of the universe. We find ourselves with two *enacted* orders of existence on our hands. On the one hand we have a world of divine archetypes or patterns—a set of dies as it were of the purest metal and the clearest cut, which no amount of stamping can alter or mar, immune to the rusting and rubbing of time and change. And on the

21 On this tendency to visualize universals and endow them with beauty and perfection *cf.* Stewart, *op. cit.*, pp. 182–185.

22 *Cf.* Santayana, *Scepticism and Animal Faith,* pp. 222–224.

other we have a profuse coinage of sensible tokens in space and time, struck from these dies, to be sure, and impressed with their images, but minted in an alloy of stuff so base and so friable that they are already blurred and crumbling at the moment of their issue. The world of Forms becomes separated from the world of particular objects. The singleness and eternity of the essence or type is set over against the multiplicity and mortality of its instances. Immaterial is contrasted with material substance. Complete perfection is opposed to a dumping ground of every imperfection. This metaphysical dualism, naturally, supplies a breeding-ground for insidious moral distinctions, and the contrast between the two orders turns almost immediately into one of good and evil, beauty and ugliness, mind and matter, the spirit and the flesh, God and his enemies. Thus the Ideas tend to become, only too quickly, a repository for every perfection, the sensible world a dumping ground for everything we do not like.

Recently, however, the traditional view has been challenged. Aristotle's criticism has been laid to a misunderstanding, such as frequently occurs when the pupil is not over-sympathetic with his master, and the Dialogues have been subjected to a new scrutiny. The result is a "one-story" theory of the Ideas, which demolishes the Forms as metaphysical beings, and brings the whole system down to a single level. According to the advocates of this theory, among whom are numbered some of our greatest modern scholars, the Forms were for Plato merely the equivalent of what we should call logical essences. They were the meanings things have for us. By some of these critics they are identified with the eternal conditions or possibilities of existence to which any world must conform. Or they are said to have the reality of validity as opposed to that of existence. For example, all the propositions that can be made of a triangle hold good, whether or not any triangular things exist. Or again, the Forms are likened to scientific hypotheses.[23] And finally, they are identified with natural laws[24] and

[23] Von Hartmann, Lotze, and Jackson respectively. For a reference to them *cf.* Stewart, *op. cit.*, p. 109.

[24] Natorp's view set forth in his *Platons Ideenlehre.*

aesthetic and moral values.[25] From this point of view, the Ideas were for Plato, so far as he was a scientist, the concepts that described and explained sensible objects and their behavior. So far as he was an artist and moral reformer they were also visualizations of the perfection towards which men strive and yearn. But in any case the kind of existence he attributed to them was precisely the kind of existence we attribute to a natural law or a value, not the kind we attribute to a concrete object or a God. Their being was no more metaphysical than it was physical. It was simply logical.[26]

Let us try to make this logical sort of existence a little clearer. The forms or natures, for example, of the lion and the unicorn are both equally possible, equally logical kinds of animals, but by an accident of evolution the one has been enacted in the course of nature, the other not. Nevertheless, despite the failure of the unicorn to be registered by the physical world, it still exists no less than the lion as a valid form or essence that can be talked about and pictured, and that even might be eventually embodied by some future twist of the evolutionary process. The imagination cannot be said to have created it, for unless it were already a possible and thinkable Form, it could never have been thought up. The mind has simply got ahead of matter and stumbled upon it, already there, waiting to be discovered and perhaps, with luck, to be given living, physical instances of itself. In spite then of its present lack of enactment by Nature it must exist in and of itself. For if it did not exist it could not appear on the British arms, or be an object of possible biological embodiment. So, too, the last living specimen of that unwieldy bird, the dodo, was seen on the island of Mauritius about 1681, but the nature of the dodo did not become extinct when the last instance of the species disappeared. On the contrary it survived to be entertained and described by modern naturalists. If the Form of the dodo had perished, too, the accounts of old explorers and the finding of remains would have meant nothing to us, for the meaning of those accounts and those remains would have been blotted

[25] Stewart's supplementation of Natorp's view.

[26] *Cf.* Santayana, *Scepticism and Animal Faith*, pp. 77 *et seq.*

out along with the individual birds. The species is still a perfectly good species, and exists as such, even though it is no longer enacted.

Again, the number two is not two things, or two persons, or two Gods. Yet it exists in and for itself as a mathematical entity. The law of gravitation is not a gravitating body, nor is it merely an idea in some mind. It would remain as a possible formula, a manner in which bodies might still behave, even if bodies at some future time ceased to obey it, or if all bodies and all minds were destroyed. And the nature of virtue, or the nature of beauty, does not have to be staged anywhere in heaven or earth in order to be what it is. Essences then, have an existence of their own, but it is an entirely different kind of existence from that of things or thoughts human or divine.

Obviously, existence of this sort does not in any way reduplicate the sensible world or add a second quasi-concrete story to the universe, as the Gods reduplicate human nature on a divine scale or as the celestial hierarchy superimposes upon the natural world a supernatural world composed of "spiritual substances." It merely distinguishes the plan of the single storey as something separate from and independent of the bricks and mortar that embody it. But the plan when separated does not thereby become a model, more than life size and more perfect than the house itself, built of a kind of ethereal *papier-maché*.

For all that, however, such existence is of no mean sort. All the laudatory terms that Plato uses of the Forms are as applicable to it as they would be to metaphysical, divine beings. The number two, the form of the dodo, the cat-type or the dog-type, the true nature of virtue, whatever it may be, the propositions that hold good of a triangle—all these are as apart from and independent of the world of sense, as changeless, as absolute, as eternal, as omnipresent, as any God could be. Time makes no difference to them. The infinite reaches of space do not dissipate their validity. Worlds may rise and fall, the entire universe, all things, all minds, all Gods may vanish into sheer nothingness, but the lines upon which new universes might be formed, the shapes that they might assume, remain unscathed.

From everlasting to everlasting they hold good. Raised, then, as they are above space and time, life, thought, and substantiality material and "spiritual," we might rightly claim for these logical essences, quite as well as for metaphysical entities, the dignity of absolute reality, and say of them, as Plato said of the Ideas, that they have the truest being.

Such, according to the "one-storey," logical essence theory, is the status or kind of existence attributed by Plato to his Forms. It stands out, we see, in striking contrast to the kind of existence ascribed to them by the traditional, "two-storey," metaphysical interpretation. It will be well perhaps to sum up the agreements and differences between the two views in brief and somewhat pictorially, before we take up the next important question, that of the Idea of the Good. We may put the matter as follows. Plato, we may say, saw that the moving, dissolving world of sensible objects exhibited a fixed set of types and laws and values. These constituted for him, on the one hand, a map or plan of the universe, plotted by logic and science, abstract, austere, world without end the same, bathed in the shadowless and impartial light of truth. But the mind also tended to wax enthusiastic over certain features of this map. Truth, goodness, beauty were not merely essences to be noted and analyzed, but things to be fought and even to be died for. This enthusiasm and devotion colored the plan and made of it a panorama, and kept throwing into high relief individual moments and details which shone out from the rest, touched by

> "The light that never was on sea or land
> The consecration and the poet's dream,"

and became in the sudden and splendid isolation of their beauty or their moral grandeur Essences incarnate, full of life and grace, as well as truth.

So far so good. Now the divergence of opinion begins. According to the traditional theory, this plan discovered by science and logic, and glorified into a panorama by the *love* of truth and goodness and beauty, Plato took to be a second world of divine archetypes or patterns enacted outside the world of sense in some metaphysical "spiritual" substance.

In a word, he turned the general "lay out" of the world into a model in the image of which the phenomenal universe was fashioned. According to the "one-storey" view, however, he did no such thing. He never supposed that the plan was a separate world, or that it was originally traced and the panorama painted in a metaphysical medium, and only secondarily impressed upon phenomena. There was no second *enacted* order of existence for him. Forms, laws, values, meanings, although they had a real, logical being of their own apart from particular things—a being that might even be called more real than that of the unstable and perishable sensible objects —were nevertheless enacted and took on concreteness and substantiality in the world of sense alone.

II

Bearing these conflicting interpretations in mind we now turn to the question of the status of the Idea of the Good. The point is all the more difficult because of our lack of original documentation. The passages in which Plato explicitly takes up the subject—those in the *Republic*—are as small in quantity as they are great in quality. He gave, to be sure, some famous lectures on the Good which apparently puzzled his pupils and were incorrectly reported by them. But even these misleading accounts have disappeared. And both Aristotle and the immediate successors of Plato in the Academy lay no stress on this aspect of his teaching in their interpretations and criticisms of their master.[27] Indeed, the Idea of the Good was lost, not to be rediscovered till, some centuries later, the mystical Neo-Platonists, returning to him for their inspiration, seized upon it and made it the forerunner of their own doctrine of the ineffable Unity, higher than thought, higher than being, from whose inexhaustible depths, first the Platonic Forms, and then the rest of creation, emanate, even as light radiates from the central, blinding core of the sun.

That Neo-Platonism may really represent the direction in which Plato was heading at the time the *Republic* was written

[27] *Cf.* Burnet, *op. cit.*, pp. 221, 233. Stewart, *op. cit.*, pp. 53–55.

has been suggested by a modern commentator. The passages in the sixth and seventh books, he feels, show an increasing dislike for the Megaric identification of the Socratic Good with Eleatic Being, and betray a line of thought that, if it had persisted, might easily have ended in an emanation theory, with the Idea of the Good a veritable metaphysical fountain both of all Forms and all minds.[28] And not unnaturally the adherents of the "two-storey" view of the Forms have followed the Neo-Platonists to the extent, at least, of adding the Idea of the Good as a third floor. Thus some critics identify it with a divine mind or a quasi-personal God, while others consider it a principle transcending even deity.[29] And still others without engaging in this controversy feel that it "occupies a place in regard to morals and to science which the conception of God would occupy in a modern philosophy of morals and nature if that philosophy considered the conception of God an essential to its system." [30]

The "one-storey" school of criticism, however, having left no second floor in the Platonic system for a third to stand on, has brought the Idea of the Good down to the same level as the rest of the Forms. Its transcendence of the other Ideas, and even of being and reason, is no more to be interpreted metaphysically, we are told, than is the apartness of Forms from the world of sense-particulars. As we have seen, it expresses the fact that the nature of Reality is not the mere sum of its different features, but is those features arranged so as to constitute an intelligible whole; just as in a picture-puzzle the picture is more than a box full of pieces, is the pieces so fitted together that they make up in their ensemble a single design or Form. Only in the light of the whole can the real meaning of the parts become visible. Or, to put it in Plato's terms, the plan of Reality, seen in its entirety, transcends the being of any or of all of its constituent essences or Forms, and the bird's-

[28] *Cf.* Burnet, *op. cit.,* pp. 232 ff. Wilamowitz-Moellendorf, *op. cit.,* I, pp. 422 ff. Robin, *Théorie Platonicienne,* pp. 598 ff.

[29] For such identification *cf.* Zeller, *op. cit.,* pp. 279 ff. Adam, *Republic of Plato,* II, pp. 50–51. Wilamowitz-Moellendorf, *op. cit., loc. cit.* Against, *cf.* Burnet, *op. cit.,* pp. 232–235. More, *Religion of Plato,* pp. 119 ff.

[30] Nettleship, *op. cit.,* pp. 232–233.

eye vision that so sees it is higher than the process of reasoning from one detail to another, which can look only a few steps ahead. But this is not to say that the plan regarded in its entirety requires a new, separate set of drawings. One and the same sketch can give both the whole and the parts. For instance, the completed picture-puzzle showing the design that dictates the position and relations of the pieces is not a new puzzle different from the pieces that lie jumbled in the box. So, the Idea of the Good, the all-inclusive, all-explaining Form that stands out when dialectic has fitted the various Forms together in their proper logical relations, is not a different *thing* from the other Ideas. It is not a super-being, not a transcendent metaphysical entity. It is simply the Form or Nature of the totality of existence comprehended as a single fact.[31] Or, in order to include the aesthetic and moral values also, which attach themselves to the Forms and make of them perfections, we may say that the Idea of the Good focuses our desire for a world altogether responsive to all human interests and activities, not only intelligible through and through but completely harmonious and beautiful as well. It is the vision of a universe that answers in every respect the demand for absolute truth, goodness, and beauty. In a word, to quote a great champion of the "one-storey" theory, it is "the whole Universe over against the whole man." [32]

In view of these difficulties and disagreements in interpretation, there is nothing to do but to leave the question of the status of the Forms and of the Idea of the Good wide open. We have had a first and generous taste of the controversy that rages over Plato's real meaning, and we may recall the warning we sounded, when we first took up his system, with regard to the inconclusive character of much of his thought. Moreover, we may console ourselves with the reflection that whatever view we may take, we shall find ourselves in good company.

But whatever view Plato himself took—whether he regarded the Forms as logical essences enacted only in the world of sense,

[31] *Cf.* Natorp, *op. cit.*, pp. 183 ff. Stewart, *op. cit.*, pp. 51 ff.
[32] Stewart, *op. cit.*, p. 52.

or looked upon them as metaphysical beings which found their true enactment and home in some "heaven beyond the heavens" —he was launched upon a sea of troubles. For in a sense the Aristotelian criticism was acute. In any case the Ideas were different from the sensible particulars and had an existence, even if it were only logical, independent of them. Nay more, as logical beings, no less than as metaphysical entities, they existed apart, not only from the things that embodied, but also from the minds that entertained them. They were no more thoughts than they were things. Plato, then, was hard put to it by his own perplexities and doubtless by the criticism of others to make clear the relations of the Forms both to the flux of sense which displayed them and to the knowledge of which they were the objects. How, we might ask ourselves, can the abstract law of gravitation and the concrete gravitating bodies, absolutely different as they are, ever embrace one another? Furthermore, how can an immaterial essence make itself known through the alien medium of physical phenomena to a mind dependent, it would seem, upon the senses for all its information about things outside itself? We never perceive the law of gravitation or human nature in the abstract. How, then, can we know them? And knowing them here and there and individually —the law of gravitation, the nature of virtue, the universal tableness in all tables—how can we put them together logically, interpret them correctly, pass from one to another, and gradually build up a Form or design of the whole? No one of them, nor yet the whole collection of them, suggests what the design is, any more than the pieces of the puzzle as they lie jumbled in the box suggest, separately or together, the nature of the picture into which they fit. Moreover, supposing the Forms to have the greater reality and to be, as Plato expressly states, the only true beings, what are we to say of the sensible world? Has it no reality? Is it, as the Eleatics insisted, all illusion and false opinion? Or if it has reality, how does its reality compare with that of the Forms? And how can Reality be both changeless and immaterial, as in the Forms, and changing and material, as in the flux, all at the same time? And why does

the sensible kind of reality exist at all? It can scarcely be called self-existent, since its components are continually coming into and passing out of being. What, then, accounts for its presence, and why is it the kind of world it is and not some other kind?

## CHAPTER IX

## THE RELATION OF THE IDEAS TO KNOWLEDGE AND SENSE

Questions like those that concluded our last chapter must sooner or later press for an answer. And some of them were already weighing on Plato's mind and had evoked a provisional reply. Two problems particularly were to the fore—the relation of the particular object to the universal type that gave it a nature, and the ability of the mind in the act of knowledge to recognize Forms without, apparently, ever having seen them. The first question Plato approached in the belief that, although it was their Forms that made individual data what they were, turned them from nameless blurs into definite things, and invested them with being, still, the universal was not all that was real in the particular. Human nature was not the whole being of you and me. The quality of courage was not all there was to a courageous act. The individual *qua* individual also existed. The passing show of events, then, for all its shifting, dissolving multiplicity could not be dismissed, as the Eleatics had dismissed it, as all false opinion and sheer illusion. It was not a mirage; it was really there and had to be brought into relation to the world of Forms.[1]

The first steps in Plato's, or it may be in Socrates', attempt to work out the relations between the concrete object and its Form have been mentioned in the chapter on Socrates. He could not, we have seen, accept the Pythagorean suggestion that particular things are copies or imitations of the Ideas, although he employs the figure frequently, as, for example, in his criticism of the arts, and persists in its use till the end.[2] He doubtless realized that, although a useful figure of speech, to take it at its face value only deepened the gap he was so

[1] *Cf.* Zeller, *op. cit.*, pp. 383 ff. [2] *Cf.* Zeller, *op. cit.*, pp. 155 ff.

anxious to bridge. However that may be, he proposed as a substitute or supplement the notion of *participation.* The particulars *share* in the Forms. The Forms are somehow present in the particulars. Individual objects *partake* of greatness and smallness, beauty, virtue, and the like, and these essences inhere in the things that display them.[3]

But he was by no means out of the woods. The new terms, as they stood, were no guide at all. They had first to be explained. Just what do we mean when we say that individual men partake of human nature, or that abstract and universal beauty makes Helen what she is by its presence in her? Aristotle said bluntly that participation was as unsatisfactory[4] a notion as imitation,[5] that it involved many self-contradictions,[6] and that it could neither explain the existence of a sensible world nor account for the movement and change in phenomena.[7] And many modern critics have felt that it exposes a weakness rather than a strength in Plato's thought, and that the problem of the relation of the particular to the universal, the sensible to the intelligible, remained on his hands to the end unsolved.[8] Others, however, have tried to give it a satisfactory interpretation. For instance, we are told that the Aristotelean criticism is unfair, and that if we only regard the Idea as a logical essence and not as a substance, it can then be conceived as entering into all sorts of different groupings and helping form myriads of individual objects, without repeating itself in space and time. And the notion of participation, far from being an absurdity, is a very apt expression for the way in which the flux is constantly re-registering in a thousand co-existent and successive instances the infinite fertility of possible logical combinations of more general in more specific Forms. Thus, when we say that individual men partake of human nature, and individual horses of the Idea of the horse, we mean simply that

3 *Cf. Phaedo,* 100–105.

4 *Met.,* VIII, 6, 1045*b,* 7–9.

5 *Met.,* I, 9, 991*a,* 20–991*b,* 1.

6 *Met.,* I, 990*b,* 22–34. Z., 14, 1039*b,* 2–4. Z., 4, 1030*a,* 10–14.

7 *Met.,* VII, 4, 1030*a,* 10–14; 6, 1071*a,* 27 ff.; 9, 991*a,* 8–11. For a discussion of Aristotle's objections *cf.* Robin, *Théorie Platonicienne,* pp. 73–97.

8 *Cf.* Zeller, *op. cit.,* pp. 332 ff.

essences like those of flesh, blood, bone, etc., possess an inexhaustible logical capacity for being assembled over and over again in an equine or a human Form.[9]

Somewhat similar is the "intersection" theory, already discussed in the chapter on Socrates, which suggests that individual, sensible objects are caused by the overlapping of Forms.[10] For example, whiteness-in-itself, or roundness-in-itself and other universal natures, in themselves pure essences, produce, when crossed, the particular golf-ball, just as lines when crossed produce individual points. And just as the line is not broken up or diminished in length by the occurrence of the points, and may be dotted its full length over and over again without ceasing to be a line, so innumerable golf-balls, old and new, may partake of the natures of whiteness, roundness, and the like without dividing or altering them. Again, to cite yet another interpretation, it is argued that the participation "of the particular in the Idea means in logic simply the relation of the particular case to law. . . . The statement 'this thing is beautiful' is, if true, justified by its conformity with the fundamental judgment which sets forth the nature of the Beautiful."[11] In other words, participation in a Form means fulfilling the requirements laid down by the meaning of beauty or courage or cat or dog or what not. And participation in this sense does not imply any splitting up and sharing of the Form among its particulars.

Such are some of the interpretations of what Plato meant by *participation.* Taken in connection with the opinion that he never succeeded in making the notion intelligible, they show that the ground is uncertain and that we must tread warily. But whether he made sense or nonsense of the idea, the difficulty it was designed to meet of relating the particular, concrete objects to their Forms keeps recurring in one guise or another, and we shall find him constantly amending or elaborating his thought, as the case may be. For the moment, however, we may leave it to one side and glance at the other beset-

[9] Robin, *Théorie Platonicienne,* pp. 118 ff.
[10] *Cf.* Burnet, *op. cit.,* pp. 164 ff.
[11] Stewart, *op. cit.,* p. 45.

ting problem of the moment—how we can know things like Forms which are not objects of sense.

With the nature of this difficulty, also, we became familiar in the chapter on Socrates. We saw there that the mind was shut up in the body and was in contact with the outside world through the five senses alone. Perception, however, acquainted it only with the flux, with a hurly-burly of inchoate, disordered sense-stuff. Forms, types, laws, values, could not be seen or heard, touched, tasted, or smelled. And yet the mind displayed a most mysterious faculty for distinguishing, associating, grouping, and evaluating the crude items of sense. Like the uncanny child naming correctly, at his first visit to the menagerie, animals he apparently had never seen or heard of before, it could spot in the passing show now the human Form, now tableness or bedness, here the Pythagorean proposition or some other mathematical law, there the natures of goodness or of beauty. Somehow the flux appeared to be constantly reminding it of something other than perception, and its ability to see similarities and differences, to combine and to group, seemed to involve a kind of recognition of types and laws and values in the data it met, like the recognition of the features of an old friend. At birth, indeed, the soul was apparently in possession of latent impressions of these features. And the whole process and increase of knowledge might well be described as a growth that started with a vague feeling of familiarity and gradually puzzled through to a sense of complete recall and reconstruction. What then was knowledge? How were we to account, apparently sense-bred as it was, for its first shy recognition of supersensible entities like Forms and laws and values, and for the bold way in which it went on, as if to the manor born, to consort and reminisce with them in science and philosophy?

To explain this capacity for transcending the world of sense and for grasping the universal and the changeless in the changing particular, Plato resorts to mythological and poetic language and sets forth the famous doctrine of knowledge as Recollection. In the *Meno*, we may remember, he had invoked reminiscence to account for the innate character of vir-

tue. In some former existence, he suggested, we might have beheld the essence of goodness face to face, and all that moral education perhaps did was to bring out our latent memory of that with which we once had been fully acquainted. The *Phaedo*, too, dwells upon the necessity of supposing the soul to have existed before birth and in her pre-natal state to have been directly conversant with the Ideas, if we are to explain satisfactorily our ability to be reminded of essences like absolute equality, beauty, goodness, justice, and holiness, by the rough and imperfect likenesses of them we find in the world of sense.[12] But it is in the *Phaedrus* myth, to which we now return after a long absence, that the nature of this pre-natal vision is depicted at length and in detail.

Enlarging upon the famous picture of the soul as a charioteer, Plato tells us that the Gods are wont to go in procession through the streets of heaven and finally to mount to the outside of the outermost sphere, where, checking their perfectly matched steeds, "they stand upon the top of heaven and the revolution of the spheres carries them round, and they behold the world beyond." As they are carried, they behold "justice, temperance, and knowledge absolute, not in the form of generation or relation, which men call existence, but knowledge absolute in existence absolute and . . . other existences in like manner." And feeding as they do upon mind and pure knowledge, they rejoice and are replenished by the spectacle of truth.

Now, of the lesser souls those most like to the Gods succeed in following them to the outer world, but even they are so troubled by their ill-matched steeds and by the kicking and rearing of their propensity towards earth that they get but broken glimpses of true being. "The rest of the souls are also longing after the upper world, and they all follow, but not being strong enough they sink into the gulf as they are carried round, plunging, treading on one another, striving to be first . . . and many of them are lamed or have their wings broken through the ill-driving of the charioteers; and all of them after a fruitless toil go away without being initiated into the myster-

[12] *Phaedo*, 73 ff.

ies of being, and are nursed with the food of opinion." So long as the souls succeed in accompanying the Gods they remain unborn, secure in heaven. But when any one of them fails through some mishap to behold the vision of truth, she falls at once into the body and is born a man—a philosopher, or artist, or musician, or lover, if she has seen the most of truth, a righteous king or warrior or lord, if she has seen a little less, and so on down to the extreme blindness of the sophist or demagogue or tyrant. But all earthly life is a state of probation "in which he who lives righteously improves, and he who lives unrighteously deteriorates his lot," and at death the soul goes away to undergo purification for a thousand years in a sort of purgatory, and then is born again according to her deserts, it may be even in an animal. Not till after ten births and ten such purgatorial periods can she hope to win her way back to God. An exception, however, is made in the case of those who have philosophized and those who have loved much. Such, if they have been steadfast through three lives, may be given their wings and return to heaven at the end of three thousand years. The souls, however, that fall without ever having seen the Forms are born at once as animals. For they are irrational and non-human, since they lack the power "to proceed from many particulars of sense to one conception of reason," which is the essence of intelligence "and is the recollection of those things which our soul once saw when in company with God—when looking down on that which we now call being (i.e. the material world) and upwards towards true being (i.e. the Ideas)."

Every human soul then "has in the way of nature beheld true being. But all men do not easily recall the things of the other world; they may have seen them for a short time only, or they may have been unfortunate when they fell to earth, and may have lost the memory of the holy things which they saw there, through some evil and corrupting association. Few there are who retain the remembrance of them sufficiently; and they, when they behold any image of that other world, are rapt in amazement; but they are ignorant of what this means, because they have no clear perceptions. For there is no light in

the earthly copies of justice or temperance or any of the higher qualities which are precious to souls: they are seen but through a glass dimly; and there are few who, going to the images, behold in them the realities, and they only with difficulty."[13]

This description of the pre-existence and transmigration of the soul is supplemented by "myths" at the end of the *Gorgias* and the *Republic* in which the doctrine of Reminiscence is given a moral turn and brought to bear upon the difficulty of reconciling the sufferings of the innocent and the prosperity of the wicked with the justice of God and a moral government of the world. In the *Phaedrus,* as we saw, the initial fall and original sin of the soul is due to an inherent coarse streak, symbolized by the refractory steed yoked to her chariot, which pulls her down to the life of sense. Overcome by this, she enters the body, the sensible world, and the cycle of birth and rebirth. After each death, furthermore, she is judged and punished or rewarded according to her deserts, in a discarnate interval of existence.[14] In the *Gorgias,*[15] the *Republic*[16] and the *Phaedo*[17] the nature of this disembodied state intervening between death and rebirth is described at some length and with great picturesqueness. The righteous are in joy and felicity. Sinners undergo purgatorial pains suitable to their misdeeds. There is even a hell, depicted with Dantesque vividness, where incorrigible wrongdoers, for the most part Plato's favorite tyrants, are punished everlastingly as an example of the wages of persistent sin.[18] But, with the exception of these, the good and the evil alike are at last ready for reincarnation. Then they are brought into the presence of the Fates and are told to select the kind of re-embodiment they desire, which once chosen shall be their destiny. Their choice, however, is explicitly declared to be free, in order that theirs may be the responsibility and that God may be justified. And they are warned not to be over-hasty and to remember that, however humble

13 *Phaedrus,* 247 A–250.
14 *Phaedrus,* 248–249.
15 *Gorgias,* 523 ff.
16 *Rep.,* X, 614 C ff.
17 *Phaedo,* 112 E ff.
18 *Gorgias,* 525. *Rep.,* X, 615 D–616 A. *Phaedo,* 113 D–114 C.

a career may be, it may still be made a means of happiness and salvation. Then the souls draw lots and proceed, in order, to an examination of samples of all sorts, both human and animal, and make their selection. But their choice, for all that it is free, proves to be determined by the character of their past existences. Those whose minds have been darkened by folly and sensuality clutch greedily at the career of a tyrant, whereas the wise and chastened pick out quiet and inconspicuous lives. And some even select animal existences from spite or affinity. The souls of animals, too, are free to choose and pass into other animal forms or into human beings. Finally, when all have chosen, their selection is confirmed by the Fates, and having drunk of the waters of Lethe, which makes them forget their former lives, they are despatched to their rebirths.[19]

These pictures are painted with colors borrowed from the Orphic-Pythagorean palette, and are not meant, as Plato himself says, to be taken too seriously.[20] The moral they illustrate is the important thing—that the good man has nothing to fear from death,[21] that the wicked are eventually punished and purified, that we are what we are because we have been what we have been, and that we should blame our own past follies and weaknesses for our present mishaps, not, as is so often the case, chance and the Gods and everything and everybody rather than ourselves.[22]

Whether Plato also means us to take figuratively and with a grain of salt the doctrine of Reminiscence itself, as a poetic expression of the way in which, in the act of knowledge, the world of sense puts us in mind of the world of essences, or whether we are to regard it as a serious, philosophic explanation of our possession of a rational and moral nature, is a more debatable point. To take it literally comports with the "two-storey" interpretation of the Ideas as quasi-divine beings enacted in and for themselves in some metaphysical "heaven beyond the heavens." And supporters of this view have generally accepted the argument that knowledge as Recollection

19 *Rep.*, X, 616 B–621 B.
20 *Phaedo*, 114 D.
21 *Phaedo*, 114 E, 115 A.
22 *Cf. Rep.*, X, 619 C.

is seriously intended, and have considered it a vital part of the Platonic epistemology.[23]

Plato himself, however, confesses to a certain lack of confidence in the literal truth of the doctrine.[24] It is difficult, too, to reconcile it as literal fact with the "one-storey" theory of the Forms. Hence those who regard the Ideas, not as metaphysical entities, but as simple logical essences and "visions," are inclined to look upon the Reminiscence explanation of knowledge as a somewhat misleading burst of poetry and mysticism,[25] or, at the most, as an allegory of the psychological flavor of memory with which knowledge is impregnated. Suppose, as an illustration of the latter point, that I meet first you and then another man. I recognize his similarity to you, and my recognition of it is in a way a memory of you in him, evoked by him. Moreover, what I recognize or remember of you in him is not the points in which you two differ, but those in which you are alike—in other words, the Form or nature that you both have in common. My recognition, then, of the one of you in the other may be described as also a kind of memory of human nature in general—a reminiscence of the Idea of man. And when the common quality or nature is an object of emotion and becomes suffused with value and perfection, or in other words, when the Idea becomes an ideal, and my enthusiasm makes of it a thing divine, then my "memory" seems to read back into and reveal another, higher world. Of this reminiscent "feel" that experience, and particularly the experience of timeless and universal truth and beauty and goodness, has for us, the doctrine of Recollection, we are told, is an apt and vivid expression. Only Plato is forced by the lack of a scientific psychology to set forth in poetry and myth what we to-day can analyze and account for in psychological terms.[26]

The Platonic doctrine of existence after death has given rise to similar perplexities and difference of opinion. In the *Symposium*, we may remember, Plato is concerned not so much

[23] *Cf.* for example Gomperz, *op. cit.*, II, Bk. V, ch. 8; Zeller, *op. cit.*, pp. 406 ff.

[24] *Meno*, 86 B.

[25] *Cf.* Natorp, *op. cit.*, pp. 34 ff.

[26] *Cf.* Stewart, *op. cit.*, pp. 192 ff.

with what we should call personal survival—an overlapping of birth and death by the individual's soul—as with a quality of life theoretically attainable in our earthly existence. Amid things temporal, we learn, we are able to perceive and to grasp the eternal, and so far as we entertain and enact only deathless visions, we may be called here and now immortal. True immortality lies in rescue from the flux, in being so preoccupied with the timeless and the changeless and the universal that time and change, personality and death, are of no account and we forget about them altogether. Compared with such deathlessness mere personal survival might seem trivial and in a way a contradiction. For it would not detach the soul from the flux but would serve to keep her immersed in it. And the desire to survive death would not betoken a love of the eternal and the universal, but would betray a lingering attachment to particular and temporal existence. Moreover, in any future life the soul could obtain the higher immortality only as she can in this, by freeing herself entirely from all sense of personal continuance and losing herself in the timeless, which does not last or continue, but simply *is*. Paradoxically enough, then, so long as the soul survives death she is not yet deathless. For to go on after death means that she is still caught in the unending cycle of rebirth, and lives on only to die again. To make herself truly immortal she must cease to care about being everlasting.

It may, then, have already seemed odd to us to find Plato interweaving with a very lofty philosophic doctrine the cruder, theological tenets of pre-existence, personal survival, and reincarnation, which were taught by the Orphics and Pythagoreans. And it will strike us, perhaps, as even stranger that in the *Phaedo,* to which we now turn, he should appear no less eager to prove the more vulgar view than he was in the *Symposium* to refine the concept of immortality and make of it a quality instead of a quantity of existence. We may note in passing that the modern philosopher, Spinoza, who rose to a similar height in his view of what constitutes true immortality, was careful to reject altogether the notion of personal survival, which he regarded as a vulgar superstition.[27]

[27] *Ethics,* V, Props. XXI ff.

The *Phaedo*, which is perhaps the most dramatic and the most touching of all Plato's writings, depicts, we may remember, the execution of Socrates. The dialogue purports to be an account of his last words with his more intimate friends and disciples. They have gathered early one morning in his prison, knowing that he must die that day. The talk, naturally enough, soon turns on immortality. Socrates expresses the belief that death is but the liberation of the soul from the bondage of the body, and is therefore not to be dreaded but rather to be desired.[28] Some of his disciples, however, are not so sure, fearful lest the soul vanish away into nothingness. And then the proofs begin.[29] In the first place, an appeal is made to the interdependence and alternation of opposites, a doctrine given philosophic form by Heracleitus, and rooted far back in primitive beliefs. Out of waking, for example, comes sleep, out of sleep waking. The same must be the case with death and life. Death obviously is generated by life, and, if the cycle is to be complete, life must be regenerated out of death. Secondly, knowledge as reminiscence, supported by the arguments we have already noted, is brought forward as further proof, but is met by a doubt as to whether it demonstrates more than pre-existence. It is still[30] possible that this life is our last episode and that death may close all.[31] Socrates replies by pointing out that only the compound and the changing are liable to dissolution. Of this the decomposition of the body is an example. That which is simple and unchanging cannot be dissolved. Now the soul is essentially simple and unalterable. She is not a thing of sense, and her activity of thought, if left to itself and undistracted by the sensible world, is concerned wholly with the changeless and the eternal. Hence she is indissoluble.[32]

The disciples, however, persist in their doubts. Suppose those Pythagorean philosophers are right who hold, in curious contradiction to their doctrine of transmigration, that the soul is the harmony of the body, as the music is the harmony of

28 *Phaedo*, 64–69.
29 70 A.
30 70 C–72 D.
31 72 D–77 C.
32 77 C–84 C.

the lyre. Harmony, too, is a thing "invisible, incorporeal, fair, divine, abiding in the lyre which is harmonized," but break the lyre and cut its strings, and where is its music? Or even supposing the soul to outlast one or more bodies, is there any guarantee that she will outlast them all? May she not, like a person who has worn out one old coat after another, eventually be worn out herself?[33] The answer is that the analogy does not hold. A harmony depends entirely upon the nature of the strings, and admits of degrees, whereas the soul directs, and frequently is in opposition to, the body. Furthermore she is invariable in essence, and is never more or less of a soul, even when she varies in virtue.[34]

Socrates now comes to his final argument. He tells of the development of his own philosophy and how eventually he came to regard Forms as the only true realities. And he describes the world of essences in terms with which we have already familiarized ourselves. But now what is the nature or essence of the soul? How do we define, how do we conceive her? As something living or as something dead? Obviously we conceive her as living. She participates, then, in the Idea or nature of life. But the Idea of life, like all Ideas, excludes its opposite, which is death. Hence to participate in the Idea of life is to partake of the nature of imperishability or immortality. But according to the law of contradiction anything the essence of which is immortality cannot admit of death or ever be dead, any more than the odd can be even or hot can be cold. The soul, then, when attacked by death cannot perish but will continue to exist in another world.[35]

To these arguments we must add one from the *Phaedrus*. There we are told that the soul is always active and in motion. Therefore she is the source of her own activity, or self-moving, and hence cannot be set in motion or stopped by anything outside herself. The behavior of bodies witnesses to this, for if they get their motion from without they are called inanimate, but if their motion comes from an inner principle they are animate and have souls. But that which is self-moving must needs be unbegotten by anything else and have no beginning. And

[33] 85 D–88 E. [34] 92 A–95 E. [35] 96 A–106 E.

similarly it must be indestructible and without end. If it were not so, the whole universe and all life and motion would collapse and cease. It follows that, if the soul is self-moving, "she must also be without beginning and immortal." [36]

Now what are we to make of all this? The proofs are not convincing, and even if they were, would establish, it has been pointed out, merely indestructibility of a soul-principle in general and its independence of the body, not the persistence of individual souls.[37] Still, whatever the argument may or may not try to prove, the whole tenor of the myths is that not only the soul principle but the individual soul as well, *qua* individual, survives death and is indestructible. And it is the traditional and more conservative view to credit Plato with such a belief. But in crediting him with it we cannot be too strongly on our guard against turning him into a sort of Christian apologist and attributing to him a belief in *personal* immortality as we understand the term. Nothing could be farther from his thought than the endless persistence of a man's personality in the sense of continuity of self-consciousness and feeling of identity, such as the Christian affirms. Generally speaking, such concepts as selfhood and personality, the "ego" and the "I," had not yet attained any philosophic prominence, and the freedom from these problems that so overshadow modern thought is one of the most striking characteristics of Greek speculation. So we might well be chary beforehand of trying to interpret Platonic immortality along modern lines.

It is true, of course, that personal immortality, as we understand it, figures to some extent in the picture. For a thousand years after death each individual soul retains her individuality, recognizes the souls of other people with whom she has been acquainted on earth personally or by hearsay, and spends her time in a quite Christian manner either in heaven, purgatory, or even hell. But these thousand year periods, which, after all, are mere prolongations of a type of existence essentially concrete and quasi-physical, are mere drops in the bucket of eternity. They do no more than slightly increase the

[36] 245 C–246 A.

[37] *Cf.* Burnet, *op. cit.*, p. 334. Stewart, *op. cit.*, p. 47.

span and diversity of the *mise-en-scène* of her personal career. And that career is none the less abruptly and absolutely blotted out for being briefly prolonged. Death may not end it, but rebirth does. The waters of Lethe through which every soul must pass at the end of each allotted interval of personal existence, and then only as a preliminary to terrestrial reincarnation, annihilate once and for all the self, the individual, the person, the ego, or whatsoever we may choose to call it, that she has been on earth and in her comparatively limited hereafter. All traces of self-identity, save one, are lost, and that one is of little consequence to us Westerners with our stress upon the value of individuality and our translation of identity into terms of memory and continuity of consciousness. All that survives the rebirth of the individual soul and lasts over into the next period of personal existence is the *kind of person* she was in her former life. Her predilection for good or evil is the only thing about her that comes to life again in her new individual career. To this point we shall return in a moment. It may be argued, indeed, that the doctrine of Reminiscence involves a certain continuity of memory linking the soul's past with her future. But there is little comfort in memory of this sort for anyone who wishes to read into Plato immortality in the popular Christian sense.

The doctrine of Reminiscence, to be sure, asserts the pre-existence of the soul, and explains her ability to recognize the universal in the particular as a remembering of things she has once seen face to face. But though she may remember the Forms themselves, she does not remember seeing them, or the "self" that saw them. She merely explains the fact that the world of sense puts her in mind of them by supposing that she *must* somehow have once known them, though of the circumstances she recollects nothing. There is, then, no personal tie between her past and present existences, as far as Reminiscence is concerned. The doctrine belongs primarily, and almost completely, to Plato's theory of knowledge.

For that matter, the doctrines of pre-existence and Recollection are, if anything, positive arguments against personal immortality as we understand it. Since, except for the brief

discarnate interval, death is followed by rebirth, and, indeed, is equivalent to it, the inference would seem to be that the relations between our pre-mortem and post-mortem existence are in no wise different from those between our pre-natal and post-natal life. If, then, the soul's relation to what she was and did before birth is quite impersonal, her relation to what she will become after death should be no less so. As we do not remember our past existences and personalities in this life, so we ought not to remember our present careers and selves in our future incarnations. Our memories may last through the discarnate interval that separates death from rebirth, but at rebirth they should be blotted out. On this point moreover the account is explicit, and if the myth is to be taken seriously anywhere, it is so to be taken here. At the most, therefore, the soul's *personal* survival of death is comparatively short and can in no way be compared to the everlasting future of the same, continuously self-conscious individual to which so many modern doctrines of immortality look forward. Indeed, if the stress is laid upon continuity of consciousness, the Platonic teaching is not a doctrine of immortality at all. A thousand years ago some animal or man died; yesterday I was born, tomorrow I die and retain for a brief space consciousness of myself; a thousand years hence some man or animal will be born. And that is all, if the survival of personality is all that counts.

What kind of survival and continuity, then, are portrayed in the myths and supported, if any doctrine of individual immortality is supported, by the argument we have just been reviewing? The answer is—a survival of *moral* character and a continuity of *moral* causation that remind one in some ways of the "Karma" preached by the Buddhists. The different persons or "selves" that the soul successively is—the man of a thousand years ago, of to-day, and of a thousand years hence—are bridged and linked, not by memory and consciousness of identity, but by an inheritance of moral disposition and fortune descending from incarnation to incarnation. Of these accumulating sums of merit and demerit particular souls are the bearers, and only as such have they any recognizable individual immortality. My account with life, for example, with

its profits and losses, has been deposited to my credit or debit by acts performed by my special bit of soul-substance in past and forgotten existences. And what I am making of myself here and now in this incarnation will add to or subtract from the balance, and will go to open a new account for my particular soul and determine her moral wealth or poverty after death and when she is reborn. But she carries with her from birth to birth no list, no record, of the transactions that have made or lost merit for her in the past. By raising her towards the eternal I may hasten her liberation from the wheel of birth and rebirth and her return to the divine, or by enmeshing her more completely in the world of sense I may give the wheel an extra turn; but I, the self, the personality, as we to-day understand the terms, will disappear, and the works she has performed in my name will be the only part of me to live on and to contribute to her future destiny.

If we may take individual immortality in this sense as seriously intended by Plato, we can see how it might perform a double service for him. In the first place it could be of value in dealing with the problem of the disproportion of reward to merit, which has always proved a stumbling block to belief in an unimpeded moral government of the world. If a just and benevolent God really has the universe under his thumb, why do the innocent suffer and why are the guilty spared? It looks very much on the face of things as if the world were out of hand. The doctrine of the survival and transmigration of the moral character of the soul can face this question with a fairly steady eye. The original fall of the soul, indeed, it cannot perhaps explain without in the end holding God responsible or else limiting his power. But the primal lapse from perfection is too remote to be an open sore. And once the original fall is accepted, the rest is easy going. The sufferings of the innocent here and now can always be regarded as the fruit of sins committed in past existences, and the escape of the guilty can be laid to some residuum of former good, if the promise of future punishment does not seem enough to redress the balance. Thus responsibility for our plight is laid at our own door, and God, if we do not look too far back, is justified.

Now, we may remember, this is precisely a point upon which Plato is most insistent in his account of the soul's survival of death. When the instant of reincarnation arrives we are called upon to choose what our next existence shall be like. That choice is determined, to be sure, by the character of our past life, but since it is determined only by ourselves it is free, and we alone are to blame for the result. The government of the universe in no way coerces us, and God is not responsible for our decision. Thus, not only is the essential justice of things vindicated, but the very facts that seem to tell most against it are enlisted in its behalf. If, then, Plato's interest in the doctrine of Reminiscence is at heart epistemological, we might suspect that a great, if not his chief concern with the doctrine of individual survival is largely ethical and incidental to his affirmation of the harmony and goodness of the world-order.

The second service that might be rendered by a doctrine of moral survival is this. In the *Symposium* we saw that nutrition and reproduction and memory might be reckoned a species of immortality because they helped give the soul time enough to seize and retain that impersonal, timeless quality of experience in which true immortality consists. The same may be said of the persistence of the individual moral character after death. A single existence might seem as insufficient as a single moment for regaining completely the heavenly birthright, or yet for extinguishing all hope. A more elastic discipline was necessary to save or damn. Not only had many moments to be spanned in a certain wholeness of life, but many lives might have to contribute to a long growth of moral character and clarity of vision, if redemption was to be attained. Until that goal was reached the wheel of birth and rebirth must revolve. From this point of view, individual survival, as we have already suggested in the chapter on Love, might be considered a last device, in line with food, and sex, and the retention of one moment in another through memory and thought, for saving the organism from disappearance with the fleeting instant and giving it sufficient foothold amid the quicksands of time to secure a handhold on eternity.

Furthermore, whatever we may think of the metaphysical

propriety of this conjunction of immortality as union with timeless being and immortality as endless continuance in time, the two concepts, as a matter of historical fact, generally do appear together in most religious systems, although they do not both as a rule appeal to the same type of mind. In Christianity, in Mohammedanism, in Buddhism, and in Orphism, which Plato adopted, they lie side by side. This is true even of the more vulgar forms of Buddhism, where we find the same double form of immortality as both union with Reality and the survival of Karma through successive rebirths. Moreover popular imagination, there, as in Orphism, has supplemented immortality as a persistence in time of moral character and "Karma" with periods of personal survival of limited duration, and has interpolated between death and rebirth episodes of a quasi-Christian heaven, purgatory, and hell. But in Buddhism, as in Orphism and Platonism, these extensions of personal existence beyond the grave are strictly subordinate to the survival and reincarnation of "Karma" alone, which in its turn serves as no more than a mere preparation, necessitated by sin, for absorption into the timeless, impersonal bliss of Nirvana.

In Christianity, however, the situation has been more awkward. The Western exaltation of the worth of the individual, and the preference of the Occidental for movement rather than rest, have shifted the attention of the theologian, not to speak of the layman, from immortality as an eternal, timeless state of being to immortality as an everlasting living on and on, and have relegated timelessness to a secondary place. Furthermore, when Christian theology really has recognized the difference between the everlasting and the eternal, it has found itself in a quandary. For Christian orthodoxy insists that the soul, instead of being essentially divine and one with the eternal, and therefore capable of re-absorption into it, is essentially an inferior and created being, who can never, even when saved, be rescued from the necessity of going on forever. Even in her moments of beatific vision, when she sees God face to face and contemplates the timeless and the timeless only, she must still keep her distance from him and remain everlasting,

instead of escaping from endless duration and sharing his eternity. As a result we are treated to the curious spectacle of a state of being to which time has become meaningless still going on in time, or, to put it more graphically, of a soul half in and half out of the flux, able to grasp the eternal and raise herself to it with her hands, but unable to set foot upon it and forced to tread water in the time-stream, world without end.

It may, of course, be argued that, since awareness of time does not enter into the Beatific Vision, the redeemed Christian soul will be unconscious of the perpetual immersion of her spiritual body in the flow of duration, and that her divine ardors will therefore not be chilled by it. But the metaphysical and redemptive situation none the less lacks complete grace, and cannot but distress a philosophic observer of her plight.

In the midst of our solicitude for the predicament of the Christian soul we must not, however, forget the fact, already impressed upon us, that the unbaptized Platonic souls and Buddhist chains of Karma escaped this endless immersion in time and the metaphysical embarrassments, not to speak of the incomplete salvation, consequent upon it. Plato, as well as the Buddhists, realized that once the soul had succeeded in anchoring herself to a timeless reality like the Ideas or Nirvana, she could not be expected also to keep on swimming in the flux. Attainment of the one sort of existence, he saw, must automatically put a stop to the other. The temporal phase could be only temporary. The relations, then, between the timeless and the temporal became logical and coherent at Plato's hands, even if he regarded immortality as a myth pure and simple. And if he took it seriously, as many critics would maintain, not only does his systematic thinking on the subject seem to be sounder than the Christian, but his scheme of redemption appears more thoroughgoing and more finished.

Still, these are speculations to which there is no sure outcome. Perhaps, after all, we are dealing with an unresolved inconsistency in Plato's thought, in which the quantitative and the qualitative doctrines of immortality and the theories of reincarnation and personal survival lie side by side without attempt at reconciliation or synthesis. Or the case may well be

the not uncommon one of a current theological doctrine becoming embedded in a philosophic system to which it is superfluous, or even contradictory, without causing mental irritation, just as a foreign body may be encysted in animal tissue without inflaming it. In the circumstances, then, we had best be as undogmatic respecting the part played by immortality in the Platonic system, as we were regarding the status of the Ideas.

There is one point, however, that does emerge plainly enough from the discussion. Whatever we may think of her immortality, the soul is fast arriving in the society of philosophic principles, and is being recognized as an important scientific element in the Platonic system. She had begun life, perhaps, as an Orphic *religieuse*, and had played her metaphysical part in the *Phaedrus* and the myths in the *Gorgias* and the *Republic*, cloaked in the strikingly picturesque and mystical habit of the sect. But her duties were vital to Plato's thought, and she could not long delay putting off the veil of theology and poetry, and appearing in a more sober and matter-of-fact garb as an out-and-out scientific principle. A step in this direction had already been made in the *Republic*, when in the interests of moral and political theory she had been submitted to a dispassionate psychoanalysis which disclosed, side by side with a penchant for the Ideas, worldly inclinations and capacities that fitted her to be a link between the Forms and the realm of sense. And such a link was still missing in the Platonic system.

In the circumstances, two duties in particular devolved upon her. To begin with, Plato had sooner or later to assign a definite and acknowledged place to *mind* in his system. He had, of course, assumed its existence and its importance from the start, for without it he must have realized that there would have been no consciousness at all in the universe, no stream of sensation, no apprehension of meaning in the flux, no grasping of Forms or, for that matter, no philosophizing and no Plato. Besides, then, Being and Not-Being, and the world of Becoming hovering midway between them, there had always been implicitly present in his philosophy a fourth something—the thinking subject which reflected both the flux and the Ideas, the one with its dissolving experience of appearing and disap-

pearing particular things, the other with its vision of permanent types and laws and values. Heretofore he had, perhaps, with true Greek objectivity been more interested in investigating the nature of the known and of knowledge than in the problem of the knower. But the soul had always assumed the rôle without question, and it was inevitable that when the question did arise in explicit form, her part as the perceiving and thinking subject should be given a scientifically reasoned presentation. This we shall find to be the case in the later dialogues, to which we are about to turn.

Again, Plato was finding it more and more urgent as a cosmologist to explain the fact of motion in his world. But, when he faced the problem, the old spectre of dualism—of a world of essences set over against a world of sensible objects—beset him in a new form. When it came to accounting for force and energy, as when it came to explaining knowledge, his universe was in danger of falling into two halves equally impotent. The world of particulars could scarcely be the source of its own motion, since nothing in it was self-caused and everything in it came to a speedy end. Each new moment and event was forced into existence by a preceding one, and expended itself in bringing into being the next. In the flux, then, no trace of self-origination or self-maintenance could be found. On the other hand, the Forms from the side from which they had been hitherto approached gave, as Aristotle pointed out,[38] no sign of being creative agencies. Regarded metaphysically, as archetypes or models laid up in heaven, their very perfection—their exaltation above space and time, change and movement, and their remoteness from the processes of birth and death—made it difficult to think of them as working or exerting themselves in any way. The model does not copy itself, neither does the pattern cut the cloth. An outside agent, a modeller or a cutter, is necessary. And regarded as logical essences, the Forms might seem even more uncreative and dependent upon another principle for their enactment. For there is nothing in an essence as such either to necessitate or to preclude its embodiment. There is no *logical* reason why the unicorn should not have the same

[38] *Cf.* Aristotle, *Met.*, I, 799*a*, 9 ff.

embodied existence as the lion. There is no *logical* reason why any possible form of existence should not be enacted in the sensible world. No one Form is more or less predisposed in itself to enactment than another. If logical reasons were also forces or causes, *all* kinds of logically possible existence would be realized and have prowled about somewhere in space and time from the beginning. The unicorn as well as the lion would ramp not only heraldically but in the African jungle.

It follows that either the reason for the concrete, living, moving, enacting aspect of the universe must be sought, not in the Forms, but in another principle, or else that the concept of the Ideas must be manipulated so as to account for the dynamic aspect of the world. In either case, however, the procedure would be the same. An intermediary concept was needed of a kind of reality that should combine the fixed, imperishable, and simple nature of the Forms with the variable, manifold, and flowing quality of the world of particulars. This principle must be living, moving, and teeming with repetition, but it had also to be as deathless and self-originating as the Forms, and so akin to them that it could transfuse them into its life-blood and set them in circulation in a medium of sense and multiplicity.

Once more Plato found what he wanted, ready at hand, in the Orphic *religieuse* as she stood. Even in her theological garb, her fitness for his purpose could not but be recognized. The soul was both in the world and yet not of it. Implicated in the flux and participant in its movement by virtue of her attachment to the senses and the body, she was also possessed of the divine spark, the mind, "the image of Dionysus," whose saving grace of knowledge and reason redeemed her from the flux and united her with the eternal. She might die like all things mortal, but unlike them she rose again from the dead. She was in time, she lasted, she went on, she moved; and still, in striking contrast to other moving and changing objects, she was indestructible and went on forever. To put it metaphysically, she partook of and fused the characteristics of both "being" and "becoming." Her capacity for knowledge already proved her ability to transform "becoming" into "being." Why, there-

fore, should she not also have the reverse capacity of rendering being in terms of becoming and translating the world of Forms into a world of sensible objects, the universal into the particular, the one into the many, eternity into time, "its moving image"? But if she could do that, she was precisely the self-originating, self-moving, and self-perpetuating source of all life and movement in the universe, of which Plato, as a scientist, was in search. We shall not be surprised, then, to find the soul figuring in the next chapter, not only as a thinking subject entertaining the Ideas in its thought, but also as a dynamic agent, a creative force, enacting them in a spatial and temporal medium and giving them multiple, recurrent embodiment in a physical world.

## CHAPTER X

## MORE CRITICAL DIFFICULTIES

### I

The so-called "critical" dialogues, it will be remembered, are variously regarded. By some critics they are hailed as the true Plato in contradistinction to Socrates, abandoning at last the exposition of his master's philosophy and turning to a statement of his own; by others they are thought to reveal merely the maturer philosopher developing more fully, and it may be with some change of mind, earlier teachings most of which are as essentially Platonic as the later. It is upon the latter assumption, as the more conservative and the more widely accepted, that we have so far proceeded and shall continue to proceed.

A considerable interval, we have also noted, separates the "critical" from the earlier dialogues. Outwardly given over to the teaching and administration of the Academy, inwardly, this interval must have been disturbed and lively enough. The doctrines put forward by Plato not only had provoked much opposition among the adherents of Heracleitus and Protagoras, and the Cynics and Cyrenaics, but also had met with misunderstanding and criticism within the Academy. Moreover, Plato's thought was itself a living and changing thing that must needs correct and elaborate itself. He owed, then, further discussion and formulation, if not to his adversaries, at any rate to himself.

The two dialogues by which the silence was first broken indicate the storm centre of the controversies in which he found himself involved. In the *Theaetetus* we find him returning to the question of the possibility of knowledge and rebutting, not only the Protagorean skepticism in the form in which Aristip-

pus and Antisthenes had fallen heir to it, but every theory short of his own. And in the *Parmenides* we see him apparently trying either to correct his own earlier doctrine or to clear up the misunderstandings his theory of Ideas had raised in the minds both of his foes and of his pupils. Although the *Theaetetus* is regarded by most critics as earlier than the *Parmenides*, and the questions raised by both are further developed in the *Sophist*, our narrative will perhaps run more smoothly if we consider the *Parmenides* first.

The *Parmenides* tells how the great Eleatic once visited Athens in his old age and how he conversed there with the youthful Socrates. The vigor with which Socrates is made to forestall the Aristotelian criticism of the Platonic Ideas has led a few critics to consider the dialogue spurious, and has impelled those who hold it genuine to ask just whom the young Socrates is supposed to represent. On this point there is considerable difference of opinion. By some, he is supposed to stand for Plato's own earlier doctrine of participation,[1] which is now being criticized and recanted under the influence, perhaps, of Megaric-Eleatic objections;[2] by others, to be some perverse pupil, it may be even Aristotle, or perhaps the Academy in general so far as it failed to understand its master's teachings.[3]

The argument opens *fortissimo*, intoning the familiar thesis that there is a world of absolute Forms, in which particular things "participate" and from which they draw through "participation" all their predicates. This evokes at once a series of discords. Pressed with respect to the extent of the world of Ideas, and having expanded it along lines that we have already traced, Socrates is asked whether it also includes Forms of such vile and paltry things as filth and hair. He shies, more than half inclined to balk altogether, only to be pulled up by Parmenides with the rebuke that when he is older and more of a philosopher he will not despise even the meanest things.[4] The reminder is of great importance, showing, as it does, that

1 *Cf.* Raeder, *op. cit.*, pp. 305 ff. Horn, *op. cit.*, I, p. 167.
2 Burnet, *op. cit.*, pp. 253 ff.
3 *Cf.* Stewart, *op. cit.*, pp. 68 ff.
4 130 C–E.

Plato is at last aware of a fatal inconsistency in the theory of Ideas to which hitherto he has apparently been blinded by his tendency to concentrate knowledge upon only so much of the truth as is also beautiful and good. The difficulty in a nutshell is this. The world of Ideas, if it is to satisfy our desire for knowledge, must dissatisfy our moral and aesthetic yearnings, and *vice versa*. For the world of Ideas embraced and treasured by science is far larger than that tolerated by our ideals of beauty and righteousness. Not only does science draw life from explaining that which it would be death to morals and aesthetics to justify, but the reasons it discovers for the evil and the ugly it considers no less real, no less valid, in a word, no less "good" from its point of view, than the reasons for the right and the beautiful. Conversely, the moral and the aesthetic interests are fastidious and selective. They cannot go the whole hog like truth. They are fatally poisoned by much that is meat for knowledge and science, and they violently reject as unfit for inclusion in a world perfect from their point of view many things that no complete and satisfactory description of Reality can omit from its account. In so far, then, as the Forms represent for Plato the ideals of our moral and aesthetic interests, they *cannot* include Forms of ugliness and vice; and yet, in so far as they represent the ideals of our scientific interests, they *must*.

As a result of this contradiction the trinity in unity of the beautiful, the good, and the true, which Plato was prone to find in the Idea as such, simply will not materialize, and it becomes impossible to effect a completely harmonious organization of all the Forms in a single, comprehensive Idea of the Good upon which all our interests converge. To know the truth, to be sure, is good; to be virtuous is good; to be caressed by beauty is good; and yet there is not one good but three goods. These different values or "goods" may meet and coincide in some of the Ideas, but not in all; and since beauty and moral goodness are not concentric or co-extensive with truth, or for that matter with each other, any Idea of a Good combining them all can never be entirely in focus. Vision of it will be like vision through a binocular the two eyes of which do

not pull together and cannot be wholly adjusted. The field seen from one point of view will not coalesce with the same field seen from another.

The alternative courses that Plato might have followed in the face of this dilemma are plain. Identifying the Forms fairly and squarely with the explanations of things in which science finds its consummation, he might have located their essential charm and goodness in their responsiveness to the passion for knowledge, and have regarded as accidental and secondary the virtue and the beauty upon which some of them were also complimented by our moral and aesthetic interests.[5] In that case, he would have been landed in naturalism, since the Forms which explained things would have been no better morally and aesthetically than the things that they explained.[6] On the other hand, he might have insisted that the whole volume of Ideas was pre-eminently respectable from cover to cover, and fit for perusal by the puritan or the aesthete as well as by a curious and tolerant mind, and have explained away the unfortunate slips which are so frequent in the sensible copy as typographical errors grossly misrepresentative of the original text. Evil and ugliness were not manifestations of Form, they were rather indications of some sort of interference with its expression. But if this were so, Plato was committed to a thoroughgoing dualism. It was not merely that the Forms were reprinted and multigraphed in a sensible medium; they were blotched and their meaning was perverted in the process. There had to be, then, in the universe something morally and aesthetically opposed to the Forms as well as different from them, a veritable printer's devil of sorts—a coarseness in the paper that received their impress, a carelessness, a tendency to misprint—which messed the copy up.

But Plato made no such choice. The scientist in him, intent only upon an explanation of phenomena and contented with it, clung to one horn of the dilemma; the reformer and idealist, yearning for an order "higher" and "better" as well as less obscure than the world of sense, clung to the other. And his

[5] This, according to Stewart and Natorp, is what Plato did tend to do.
[6] *Cf.* Raeder, *op. cit.*, pp. 302–303.

system as a whole, like one of those acrobats in the Minoan frescoes, balanced itself, head downwards, upon both. The passage we are considering voices the struggle of his mind to escape and surmount the relativity of human values in the vision of a world-order that transcends moral good and evil and accounts for both alike with rigid and mathematical impartiality. But very soon we shall find his heart once more uplifted to a Reality that is the author of the good only, and eager to expurgate from it Ideas of anything that might explain evil and ugliness. This latter, I think we may fairly say, is the predominant note of his philosophy. And that it was discordant with another no less important note his ear perceived rarely, and then only for a moment.

Plato's indifference to the dilemma and his insensitiveness to the discord are explicable enough. After all, some of the Ideas were good from all points of view, and all of the Ideas were good from some point of view. A portion of the field of the composite vision of truth, goodness, and beauty was actually in focus, and it was upon this portion that Plato's interest was concentrated, and within it that he located the main outlines of Reality. Moreover, because of a curious psychological ambiguity and confusion to which we are all prone in the use of the word "good," the perspective was subject to mirage and illusion. Anything that satisfies and seems good to one side of our nature kindles sympathetically the other sides and tends to take on values reflected from them. The moral desirability or the beauty of a belief, for example, predisposes us to feel it to be true. In like manner whatever satisfies the desire to know excites the sense of beauty and moral fitness, and may make even a disagreeable or undesirable truth ring with moral and aesthetic overtones. The solution of a mathematical problem may appeal not only to the scientist in us but to the artist as well. And on a fine night the Newtonian mechanics, or even the sheer physical immensity of the starry heavens, becomes invested with moral grandeur. For that matter, the pathologist will speak of a case of cancer that runs true to form as "fine" or "beautiful" or "splendid." Confront him with the full significance of his exclamations, and he will be the first to

disown them, pleading that he is venting a scientific enthusiasm only. But his ability to transfer the epithets from their original spheres and to use them, even superficially, in his own field without jarring his sense of congruity shows that his aesthetic and moral sensibilities have been really tickled by the scientific "goodness" of the case, and that his feeling has been one of general satisfaction. If, then, it sometimes occurred to Plato that because evil and ugly things were susceptible of perfectly good scientific explanations they ought to have perfectly good Forms, he may well have been blinded to the difficulties of the situation by this mirage of values reflected and transferred from the realms of beauty and moral rightness that hovers over even the cruelest truths. The delight of knowing all about hair and filth not only neutralized repugnance; it even aroused a kind of approbation, which brought, unless one was on the *qui vive*, their Ideas within the charmed inner circle of all-round perfection.[7]

But the difficulty bites even deeper than this. The conflict between the Forms that satisfy human science and those demanded by the love of human righteousness and beauty, is after all a tempest in a teapot—and, at that, merely the kind of tempest that can take place in our kind of teapot and no other. For our scientific hypotheses, no less than our moral and aesthetic standards, are the outcome of the local conditions and distinctive cast of our particular type of life. Peering through the eyes of a differently constituted organism and from a different position in time and space, the mind might conceive not only a different good but a different scientific truth. So far, then, we are dealing with a family squabble between purely human points of view no one of which transcends the system of co-ordinates arbitrarily determined by our lot in the universe.

If, however, science discovers even within the bounds of a distinctively human experience more Forms than are approved of by art and morals, so dialectic, it might seem, should take

[7] For further discussion of the difficulties of the passage *cf.* Burnet, *op. cit.*, pp. 256 ff.; Raeder, *op. cit.*, pp. 302 ff.; Horn, *op. cit.*, pp. 75–76; Natorp, *op. cit.*, pp. 227–228.

into account in its speculations the existence, the possible enactment, and the possible goodness for some different style of creature, of Forms that outraged every pettily human ideal. Its end should be to shake off the provincialism that is imposed upon the mind by being born and brought up with our peculiar kind of body, passions, and parts. It must seek to discount the angle and the field of vision to which we are restricted by our particular standpoint, by imaging the existence, though it cannot experience the nature, of angles and fields that other standpoints might reveal. For if pure reason means anything, it means a power and an impulse in man to detach himself from the sensibilities, the preferences, and the ideals dictated by his special type of organism and his attachments to the world, and to see the universe, including himself, as it might appear to creatures whose natures and situations, and therefore whose aesthetic standards and scientific hypotheses, whose goods and whose Gods, were different from and even diametrically opposed to his own. Indeed, what is philosophy itself in its highest aspect but a freeing of the intellect from bondage to a particular time, place, environment, and nature? Its goal is a vision of all time and existence equally possible to all possible forms of thinking beings in all possible worlds, whatever the idiosyncrasies of their particular ways of living and of their peculiar loves and hates may be.

Such vision, it goes without saying, does not discourage any sort of creature from the realization of the specific nature and capacities with which it may find itself endowed. On the contrary, it sympathizes with all conceivable natures and makes no invidious distinctions among the infinite variety of antagonistic forms, moral, aesthetic, scientific, and religious that the expression of those natures may assume. Every kind of being is bidden dream the dreams, pursue the happiness, create and worship the Gods proper to its kind, provided simply in so doing it be not deluded into regarding its particular perspective as absolute, and into asserting the prevalence throughout the universe of ideals and values that, as a more disillusioned reflection shows, are good only for its special predicament and mirror only its own wants.

It is true that the philosophic impulse to rise above and discount the human point of view is part of that point of view, and in common with all our interests springs from our organic structure. With the rest of us it lives and loves, casts its vote, and pays its taxes at a given place in Reality under given conditions of life. Our philosophy, no less than our science, art, morals, and religion, is human, and human it must remain till the end. It is domiciled upon mother earth, and from her it draws the income that enables it to exist. But, unlike our moral and aesthetic interests, reason knows that it could live quite as happily anywhere else, and that it would feel equally at home and equally rich in organisms whose habits and sensibilities were wholly foreign to human ways. The love and enjoyment, then, of a detached and impartial vision which beholds and affirms the relative and accidental character of every particular system of spiritual co-ordinates, might seem, as Spinoza later pointed out, the one form of self-realization and happiness common to all mind, wherever and in whatever circumstances found. And here, if anywhere, we might argue, at the elevation of this serene and disinterested contemplation of all being, unclouded by purely human values, however dark or splendid, the Platonic Ideas should reveal themselves.

Plato, however, again falls between two stools of thought in this deeper conflict of the human with other possible points of view, just as he did in the lesser struggle of science *vs.* the moral interests within the distinctively human sphere. The man in him quite justifiably affirmed the validity in human life of the ideals proper to our special system of co-ordinates, and made of them the Ideas. And the enthusiasms of the artist, the moral reformer, and the religious devotee inevitably pressed him, on the one hand to ignore the existence and bearing upon his philosophy of any Forms other than those exemplified in human experience, and on the other to impose upon the entire universe as absolute—that is, as good for every type of being —the Forms that human experience did manifest and cherish. But at the same time, the philosopher in him, while reaffirming the authority of these Forms so far as we are concerned, seems to have been haunted by a doubt whether the whole structure

of Reality was cast in their mould alone. The "spectator of all time and existence" strained against the gravitational pull of our little earth and aspired to heights at which landscapes in the universe other than terrestrial disclosed themselves to a wider surmise. Could, after all, the nature and the God of things as they are be really figured out by formulating, however carefully, a vision of the nature and the God of things as we human beings would like to have them? This doubt and this question are perhaps the deepest, if not the immediately conscious inspiration of Parmenides' rebuke. And even if they do not suggest the reproof, they are directly suggested by it.

But we have devoted far more attention to the point than ever Plato does. The business in hand for him was the difficulties that beset the relation of the Forms to their sensible particulars. The crux of these difficulties his adversaries seem to have found in the doctrine of participation as it was developed in the *Phaedo,* for we find him criticizing and rejecting the doctrine himself in the crude metaphysical form in which his opponents understood it. The particulars, he points out, cannot be said to partake of the Ideas, for that would mean either reduplicating the Form in its entirety in each one of its instances, or else parcelling it out in pieces or parts among individual objects—both of which alternatives are equally absurd. How, for example, can the same human nature be wholly in me and also wholly in you at the same time? But again, how can it be only partially in you and partially in me, if we are both wholly human. Moreover, and here Plato employs the famous "third man" argument originated by the Megaric School, the human beings and the human nature in which they participated would both participate in a further humanity (which made the Idea and the particular both *human*). And this humanity, along with human nature and human beings would in its turn participate in still a third common quality or Idea of human-ness, and so on *ad infinitum.* This objection, Plato hastens to point out, also overtakes the view that the particular is a copy of its Form and participates in it in the sense of resembling it. In that case, particulars would be like one another and belong to the same class by virtue of resembling the same standard pattern

or Form. But by the same token they could resemble their model Idea, only if both this Idea and themselves were like some further common pattern and standard of likeness, and so on *ad infinitum* again.[8]

Nor can we escape the difficulty by regarding the Forms as thoughts existing only in the individual soul, or, in other words, as purely subjective, mental concepts. To begin with, a thought gets its point from being about something. And since thinking is generalization, the something that it grasps, and is about, is the common characteristics or natures of things. Hence the Form, being just this common nature or type, would seem to be that which a thought is about rather than the thought itself. But if this be so, the Idea reverts to independent existence, and all the old difficulties of participation are revived.[9] Furthermore, even if the Ideas were thoughts, these difficulties would persist. For the particular objects which participated in them would partake of the nature of thought, and would therefore themselves be thoughts. But if they were thoughts, either all objects would think, or else there would be thoughts that did no thinking and hence were devoid of thought —which is absurd.[10]

The question then of how sensible objects can participate in the Forms regarded as metaphysical entities remains unanswerable. And still other difficulties follow fast and furious. If the Forms have an existence of their own in and for themselves, they cannot exist in us. They must be outside and independent of our minds. But in that case their natures will be determined by what they are in themselves, not by the resemblances we discover in the sensible world and the generalizations we make regarding it. Nor will they necessarily answer to the names by which we call these generalizations. The general terms we use will apply only to our experience and hold true only of the world of sensible objects. They do not get at the Forms in themselves and describe their real natures. What the Ideas are really like we cannot find out. They are not what we are thinking about, and are not the objects of our so-called knowledge. They "have nothing to do with us, nor we with them;

[8] 131 A–133 A. [9] *Cf.* Raeder, *op. cit.*, p. 304. [10] 132 B–C.

they are concerned with themselves only, and we with ourselves."[11] In short, it is no less impossible for our minds to entertain the Ideas, if the Ideas are things in themselves, than it is for material objects to embody and enact them.

Obviously, the dialogue continues, if the Ideas are to be known at all, they can only be known by an absolute knowledge which is in possession of absolute truth. God, for example, may know them. This sounds reasonable, but is it? What is sauce for the goose is sauce for the gander, and turn about is fair play. If our knowledge cannot reach the Forms in themselves, no more by the same token can an exact and absolute knowledge, acquainted as it is only with the Ideas as they are, know anything of the world of inexact and fallible human experience. To attribute, then, absolute knowledge to God is to cut him off from any knowledge or direction of us and our affairs. He will be confined to his proper, divine realm, just as we are to our human sphere. For the Forms are the Forms, the sensible world is the sensible world, and never the twain shall meet.[12]

Such, says Plato, speaking through Parmenides' lips, are only a few of the difficulties involved in supposing that there are Ideas, and that they are things-in-themselves. No wonder that their existence, or at any rate their relevance to knowledge will be denied. And yet the fact remains that without them there will be nothing in which the mind can come to rest, no reasoning to a conclusion, no philosophy. Is there, then, any way of looking into their natures more carefully and more deeply, and of redefining and reasserting them? Let us see.[13]

The means that Plato uses to clear up the misunderstandings of his critics, and bring back the Ideas in a tenable form, is not without humor. Deliberately, it would seem, taking off the paradoxes of Zeno, he puts into the mouth of Parmenides an appallingly long-winded and intricate argument, which completely demolishes, among other things, the Parmenidean teaching that Reality must be one, simple, and unchangeable. Into the labyrinthine windings of his reasoning we will venture only far enough to see how easily we might get lost in them. Pure Oneness, we are shown, can neither exist nor be even conceived.

[11] 134 A. [12] 133 B–134 E. [13] 135 A–D.

As an abstract idea it is a blank, of which nothing else, even existence, can be predicated without adding to, and therefore adulterating, its unadulterated unity. But if existence cannot be attributed to it, it cannot *be*. How then can it be One? [14] Pure multiplicity furthermore, it turns out, is in the same box. For the Many cannot be conceived except as *one* sum of many parts, each one of which is *one*. And this sum must be thought of as finite or limited, since it is a certain, definite sum or whole. But it must also be thought of as infinite, since the number of parts into which it can be divided is unlimited and hence cannot be computed. If, however, this sum is both finite and infinite, it will be both like and unlike itself, and the same as itself and different from itself, not to speak of other paradoxical consequences.[15] The ideas, then, of pure unity and pure plurality are both self-contradictory.

We fare even worse, naturally, if we think of just Oneness or just Manyness as really existing in and for themselves. If pure Unity is not only one, but also exists, then it is no longer pure Unity but a duality combining the two elements of Oneness and Existence. Moreover, this duality breeds with rabbit-like rapidity, since the two elements couple with one another and each produces a new duality, and the process continues without end. For example, the element of oneness in the original One *exists*, and the element of existence is *one*. So that either element of the One, like the One itself, is dual. And again the two factors of unity and being in either element are both of them one and existent. And their oneness *is*, and their being is *one*, and so on *ad infinitum*. The so-called one Reality, then, turns out to be an infinite plurality. And yet, on the other hand, if the One has existence and *is*, it must be something. But if it is something, it must have a definite nature or form. If it has a definite form, it must be definable, limited, finite. And a host of other self-contradictions follow.[16]

So, too, with a Reality that is a pure plurality without any oneness. If it has no unity of any sort, it cannot be a whole, since a totality is a One of sorts; and it cannot have parts, since parts are units. Number and multiplicity, moreover, in-

[14] 137 C–142 B. [15] 157 B–159 B. [16] 142 B–155 E.

volve units, so they could have no place in it. Nor could it have several characteristics or even one characteristic, for that would imply the presence of unity.[17] In short, a world that was merely a plurality to the exclusion of all unity would be as impossible a sort of being as one that was sheer unity to the complete exclusion of plurality.

Having already bewildered his readers almost beyond endurance, Plato proceeds to heap Ossa on Pelion by inverting the entire argument and pointing out the no less paradoxical results of assuming the non-existence or the inconceivability of either the One or the Many.[18] And then the dialogue ends suddenly, perhaps with malice aforethought, leaving everything in the air and everybody wondering whether he is standing on his head or his heels. Still, the conclusion to which we are expected to come when the vertigo is past is plain enough. The One cannot exist or be thought without the Many, the Many cannot exist or be thought without the One. Reality, however else we conceive it, must combine the two, must be one organized, self-contained whole, having a single nature or form; but at the same time this Unity is the totality and the organization of a vast and varied assemblage of many different facts and events.[19]

But the silence into which Plato retires so abruptly is pregnant with more than this. The excursion into the paradoxes of Eleatic and Megaric Reality was self-confessedly undertaken as a means of clearing up the real nature of the Forms and of their relations with one another and with the sensible world. And it was those who misunderstood and misrepresented the Platonic doctrine, apparently by giving it an Eleatic and Megaric twist, that the shoe was meant to pinch the hardest. They are as good as told outright that the Forms, and perhaps the notion of "participation," if properly grasped, are not touched by the objections they have urged. Get rid of the absurd notion that the Forms are Parmenidean or Euclidean Ones, Plato seems to be saying to his critics. Stop thinking of them

17 159 B–160 B.

18 160 B–166 C.

19 *Cf.* Burnet, *op. cit.*, p. 272; Stewart, *op. cit.*, pp. 80–81; Horn, *op. cit.*, II, pp. 129, 155.

as a set of absolutely pure, homogeneous, self-contained beings, each one of which is nothing but itself and exists in complete isolation from everything else. For that matter, the sooner you shake off the idea that such beings can exist at all, the better. Take your cue as to the true nature of the Forms from the way they work in the process of knowledge. There they give unity, and significance, and a name to groups of sensible particulars. They intersect and include, and help describe and define one another. And all together they enter into and constitute a single unified system, the Reality behind phenomena on discovering which the heart and mind of man are set. Subtract from the Idea of the whole the Forms of its parts and aspects, and there is nothing left. Nay more, try to isolate in your thought the barest and most abstract concept of unity from other logical categories like similarity and dissimilarity, identity and difference, motion and rest; and unity itself evaporates. There is no One, unless it be the Oneness of a Many. Again, dissociate any one of these categories or any one Form from the others or from the whole, and you draw a blank. There is no Many except as they are interwoven with one another and knit together into a One. In the same way, empty the Form of the particular things to which it refers, and try to regard it as another thing, a separate unit existing in itself apart from them, and it becomes void and without meaning. Or try to think of the particulars as a mere plurality without any unifying principle or nature shared in common, and they are reduced to a nameless chaos. What, for example, would the Form or nature of man amount to unless it were applicable to individual human beings. And what would it be apart from the other Ideas, of biped, and animal, and flesh, and blood, and tallness, and shortness, and the like, that include and intersect it and help make it what it is? Squeeze it out of its sensible particulars, distil it clear of all other essences, and bottle it up a thing apart, and it smells and tastes of nothing, not even of itself. And the same is true of any One that you try to conceive as merely One. Whatever kind of existence and unity, then, a Form may have, it must at least be such as to permit the Form to partake of other Ideas and enter into larger

systems without losing its identity, and to be present in its particulars without division or diminution of its essence. Not until you have got this through your heads can you begin to criticize the doctrine of Ideas intelligently.[20] And then the term "participation" proves not to be so senseless after all.

II

The question of how the Ideas can "get together" both with each other and with their particulars is taken up in the next dialogue, the *Sophist*. But, as we have already said, we shall read that dialogue with less of a break if we approach it through the *Theaetetus*, to which we now return.

The scene of the *Theaetetus* is laid in the house of Euclid at Megara, where Plato, along with other refugees of the Socratic circle, had foregathered after the master's death. The dialogue itself, harking back to a still more distant past, purports to relate a conversation about the nature of knowledge once held by Socrates with the mathematician, Theodorus of Cyrene, and his young protégé, Theaetetus. Three definitions of knowledge are successively analyzed and rejected. The first is the familiar Protagorean doctrine, revived by both the Cynics and the Cyrenaics,[21] that knowledge is perception—a doctrine to which, Plato remarks, apparently with the Cyrenaic theory of sensation particularly in mind,[22] the teaching of Heracleitus naturally leads. For if all things are in flux, then perceiver and perceived, the knower and the known, are both nothing but motions which only become subject and object when collision between them occurs and a resultant flash of perception takes place. Obviously, then, if nothing is permanent there can be no permanent minds to do the knowing or things to be known, and knowledge itself will amount to no more than

[20] It is a question whether the One and the Many argument is meant to apply primarily to the relation of the Idea of the Good to the other Ideas, or to the relation of the category of Unity to the other categories, or also to the relation of the Form to its particulars. *Cf.* Stewart, *op. cit.*, pp. 81 ff.

[21] *Cf.* Horn, *Platonstudien*, II, pp. 262–263.

[22] *Cf.* Horn, *op. cit., loc. cit.;* Gomperz, *op. cit.*, II, Bk. V, ch. 16, § 2.

a mere acquiescence in what seems true from moment to moment.[23]

But this view of knowledge, Plato continues, is untenable. That it renders it difficult, if not impossible, to distinguish waking from dreaming, delirium and madness from sanity; that it arbitrarily makes the experience of the individual *man,* rather than that of the pig or the baboon, the measure of truth, and as arbitrarily singles out Protagoras from other individual men as superior in wisdom and therefore more of a measure—are perhaps superficial objections, which, for all their impressiveness and seeming cogency, do not really disprove the relativity of knowledge.[24] More serious is the fact that if we take the Protagorean assertion literally we shall be obliged to say that we do not know what we only remember, since memory is not immediate perception.[25] But the crowning absurdity is this. In maintaining that what appears true to each man *is* true, Protagoras admits that all other opinions are as good as his own. To admit, however, that the opinions of his opponents are true is to concede that his own are false. Moreover, if he really had the courage of his convictions he would not pretend to teach. By setting himself up as an instructor he admits "one man to be wiser than another, and that the wiser is a measure." For that matter, men are accustomed to seek and even pay through the nose for expert advice—Protagoras' for example—and to defer to it as containing a larger measure of truth than they themselves possess. In a word, Protagoras is refuted not only by his own logic but by his own practice.[26]

The Heracleitean teaching, too, instead of supporting the doctrine that knowledge is perception, really cuts the ground from beneath its feet. For if, as the theory demands, there is incessant change not only of place but of quality, there can never be any recognition or fixation of a quality as such. Noth-

[23] Theaetetus, 152–157 C, *cf.* 182 B. For Plato's distinction between locomotion and alteration in the course of the argument, and for the weakness of his view that motion must include both kinds of change *cf.* Raeder, *op. cit.,* p. 285; Gomperz, *op. cit., loc. cit.*

[24] 157 C–163 A.

[25] 163 A–164 B.

[26] 164 B–179 A.

ing is ever to be caught standing still and being something. But if we cannot arrest and detain a thing long enough to tell what it is, we cannot be said even to perceive it. Sensation itself becomes impossible, and so-called perception might as well be called non-perception. As for any knowledge founded on such shiftiness, we can no more define what it is than what it is not. "Every answer upon every subject will be equally right," and, as Plato's first teacher Cratylus had pointed out, words will be meaningless and should not be spoken.[27]

We may also, Plato adds, approach the matter from another angle. If the mere having of sensations is all there is to perception, how do the reports of our different senses ever become associated and referred to the same object? How, to choose a modern example, are we able at a concert to link the sight of the musicians with the sound of their playing? The eye gives us one lot of sensations, the ear another, but since the eye is unconscious of the existence of sounds, and the ear of sights, neither of them can combine the two. There must, then, be something more to perception, something *by* which things are perceived *through* the sense organs as instruments.

Again, when we perceive, we are immediately aware of likeness and unlikeness, sameness and difference, unity and plurality, being and not-being, and it is the application of these categories, or things shared in common, to the data of sense that transforms the raw material of perception into knowledge. But these categories are not themselves seen, heard, smelt, tasted, or felt. The cataloguing, like the associating, has to be done by something other than the sense-organs. What then is this something?

In answer, Plato fulfils one of the predictions we made at the end of the last chapter, and introduces the soul as the permanent perceiving and knowing subject. The data with which she works, to be sure, come to her by way of the bodily organs, but she possesses an inner structure or instrument of her own—the mind's eye, as we might say—by which she perceives what is universal and common in them. And it is from the possession and use of this spiritual organ of vision in

27 179 A–183 B.

combination with the reports of the senses that knowledge flows.[28]

But our difficulties are by no means over. We see, indeed, that knowledge originates not in the senses but in the perceiving subject, the soul, and we are prepared for a new definition of it. *Knowledge*, we are now told, *is true opinion*. This definition, however, as Plato points out, involves us at once in a most baffling philosophic question—that of the possibility of error. How can we have a false opinion? Error cannot arise from a confusion in our thoughts, for we cannot mistake this thought for that, or what we think we do know for what we think we do not. In a word, we cannot hold an opinion and at the same time hold it to be false. Nor can error arise from mistaking the non-existent for the existent, or one object for another. The non-existent is nothing, and to think about nothing is to stop thinking—and mistaking. Similarly, I cannot confuse two objects, if both are present in my mind—the dog, for example, I take to be a dog with the cat I take to be a cat—and I certainly cannot confuse them if only one of them is there.[29]

Error, then, cannot lie in a confusion of one thought with another or of one percept with another, since these are always clearly what they are. May it not, however, arise in the process of cataloguing things under concepts, and consist in assigning some novel or even some familiar datum of sense to the wrong class? For example, the mind may be likened to a wax tablet upon which our perceptions are impressed. In the wise man the wax is of such good quality that it takes and holds deep impressions—tenacious memories as it were—into which incoming percepts of the same sort are immediately and correctly fitted. In inferior minds, however, owing to the faultiness of the wax the memory images may be so blurred and shapeless that the incoming sense-data are wrongly identified and assigned.

Still, there are such things as errors of pure thought where there is no perception. We may add the number five and the number seven together and hold the false opinion that the result is eleven instead of twelve. The wax tablet illustration, then,

[28] 183 B–187 A. [29] 187 A–191 A.

will not work, and our attempt to explain false opinion as wholly a misrelating of sense and thought has failed. What are we to do? [30]

Perhaps, the argument continues, the difficulty may be overcome if we distinguish between *having* and *holding* opinions, and to that end think of the mind as a great bird-cage in which knowledge of all sorts, captured and stored up through years of experience, is flying about. This knowledge we *have*, or possess latently. But the specific act of *holding* a true opinion about a thing, or, in other words, *knowing* it, means utilizing with respect to it the information we possess. It means reaching into the bird-cage and catching hold of those items of knowledge that suit and explain the situation in question. Now, may not error consist in seizing the wrong bird in the shape of some unsuitable item—the number eleven for example, instead of twelve, to size up the situation $7 + 5$?

But can the exchange of one bit of real knowledge for another ever become false opinion? And how can we mistake one item for another? To say that there are also forms of ignorance flying about, which we grasp under the impression that they are knowledge, does not help. It is as impossible to mistake that of which we know ourselves to be ignorant for that which we know that we know, as it is to confuse one thing that we know with another.[31]

Apart, however, from the perplexities of accounting for error, the theory that knowledge is true opinion is faced with another difficulty. We may hold a true opinion by chance or luck, without having any grounds for it. Judges, Socrates observes maliciously, are frequently persuaded by specious oratory into delivering opinions that, for all their lack of a sound basis, happen themselves to be perfectly sound. Such opinions may be right although they involve no knowledge of the case whatsoever.[32] This difficulty provokes a new definition. May we not, asks Theaetetus, describe knowledge as *true opinion for which reasonable grounds can be given?* But another difficulty at once arises. Can there be any such thing as a reasonable ground? Grounds are simple and unanalyzable, like the sounds

[30] 191 A–196 C. [31] 196 C–200 C. [32] 200 D–201 D.

or letters in a syllable. They are simply there—final, unescapable data behind which we cannot go. But the process of reasoning is synthetic. Knowledge combines, puts two and two together, and its object is complex, like the syllable which the letters form. We are confronted, then, with the paradox that the elements upon which a rational explanation is based are themselves inexplicable, and that the grounds of knowledge cannot themselves be further explored, defined, and known. But how can we know the whole if the parts are unknowable? Moreover, the whole, being more than the sum of its parts, is itself in a sense an irreducible unit, and in so far as it is that, it cannot be analyzed and explained. And yet the fact remains that not only do we feel we *know* such simple elements as the letters in the syllable, but also that in learning we always begin with them as the *more* knowable.[33]

Again, what do we mean by the process of reasoning and explanation? It is more than finding words to express our thoughts, and it is more than rattling off the names of the parts of which a thing is composed, as Antisthenes implied. We may do that without *knowing* what we are talking about. Nor can explaining lie in stating the distinctive characteristics of a thing which mark it off from everything else. Such discrimination is implied in the mere rightness of an opinion, and it also implies that we recognize and therefore already *know* the distinctive marks of the object in question. We find ourselves, therefore, merely defining knowledge in terms of itself.[34]

The *Theaetetus* ends like the *Parmenides*, in the air, and as Plato himself says, negatively. We have discovered, not what knowledge is, but what it is not. At the same time, as in the *Parmenides*, the inference we are intended to draw is plain. It is hinted at in a digression into the nature of the consolations of philosophy,[35] in a passage that bids us fly away from earth and its evils to heaven and become like God.[36] This flight, we may gather, is not merely a moral but an intellectual process. Knowledge, like salvation, can only come through transcending the world of sense. Reasoning consists in discovering and grasping the Forms, the eternal types, and laws,

[33] 201 D–206 B. [34] 206 B–210 D. [35] 172 D–177 C. [36] 176 A–177 A.

and values, that persist and hold good forever in the flux of experience. Without the Ideas, we could not extract any meaning from the world of sense, have any true opinions, or give any rational grounds for believing anything. In a word, without the Ideas, knowledge would be impossible.[37]

But it is not only the problem of knowledge that receives no explicit solution in the *Theaetetus*. Its Siamese twin, the question of the possibility and origin of error is also left crying for an answer. To the quieting of this difficulty Plato addresses himself in the *Sophist*. Complete and speedy relief, however, involves recourse to metaphysics as well as logic. And the further effects of this metaphysics upon the nature of Reality and the status of the Ideas prove to be of great interest in supplementing the treatment discussed in the *Parmenides*.

III

In the *Sophist* the dramatic manipulation and literary charm that mark the earlier works and linger even in the *Theaetetus* and the *Parmenides* disappear entirely, and we are confronted with a rather dry and technical discussion whose argument and movement are but thinly cloaked by the dialogue form and are, if anything, impeded by it. There is no scenery and no stage. The characters of the *Theaetetus* merely reassemble, bringing with them an Eleatic stranger to bear the brunt of the conversation.

The problem of the nature and possibility of false opinion and error is not broached at once, but is prefaced by a leading question as to the distinguishing marks of sophistry. Plato applies to the answer a logical or dialectical method that seems to have originated with him, or in the Academy—the method of definition by *division*. This method, which was of great importance for the future development of logic and science,[38] consists in taking some wider class to which the object we wish to define indisputably belongs, and then encircling and closing in upon our quarry by a series of more and more specific determinations, till finally it is cornered and run to earth in the

[37] *Cf.* Raeder, *op. cit.*, p. 193; Horn, *op. cit.*, pp. 259 ff.

[38] *Cf.* Taylor, *Plato*, pp. 376 ff.

particular, distinctive character that sets it apart from all else. For instance, to take Plato's own example, angling is an art, and the angler is therefore, broadly speaking, an artist of sorts. His art is acquisitive rather than productive, acquires by conquest rather than by exchange, and conquers by craft rather than by force. His art, then, is the art of hunting. But he hunts animals rather than inanimate objects, and aquatic animals or fish rather than any others. These, however, he hunts with hooks or spears rather than by nets—which differentiates him from fishermen in general. And so we find out how to define the angler.[39]

Apply this method now to the Sophist. He, too, is an artist, and a hunter. But he hunts land animals, not fish, and tame land animals rather than wild, and of these particularly man. Him he hunts, not by force, but by persuasion, and by private persuasion rather than public, and for gain rather than for love. He is, therefore, a chaser of wealth and position. If we approach him from other angles, using the same method of determination, we can also pin him down to being a huckster of ready-made intellectual wares, and a professional arguer and self-styled educator, who succeeds because of his talent for making appearances look like realities and false opinions seem true. This definition, however, lands us in unspeakable difficulties. As an artist in illusion, the Sophist would seem to convince people that what *is* is not, and that what is not *is*. For a proposition, if it is false, must assert the existence of the non-existent, the being of not-being, and *vice versa*. But how can we predicate not-being of any existent thing or things? That would be a contradiction in terms. Moreover, not-being is nothing, and to predicate it is equivalent to saying and thinking nothing. Nor can anything be predicated of it—not even unity or plurality. The very word is a self-contradiction, since the "not" nullifies the "being." The Sophist, then, would appear to be trapped. For in seeking to create illusions and make the false look true, he is attempting the impossible feat of palming off on us something that is really nothing. He is predicating being of not-being. And yet, the moment we try

[39] 218 E–221 A.

to show him up, we, too, find ourselves in the same fix. We cannot expose or even admit the falsity of his opinions without maintaining that falsehood exists. And "in maintaining this, we are compelled over and over again to assert the being of not-being which we admitted just now to be an utter impossibility." [40]

Clearly, then, we must either throw up the sponge and deny the possibility of false opinion and of sophistry, or else we must see if there is not some sense in which we can consistently say that not-being is and that being is not. To the latter task Plato now applies himself. It is best undertaken, he feels, by investigating in the first place what we mean by "existence" or "being." Once we have determined this, we shall be in a better position to understand the true significance of negation. The earlier philosophers, we are told, do not throw much light on the subject. They used the term uncritically, assuming the "being" of their first principle or principles, without asking what the word implied. And the Eleatics have not helped matters by using it interchangeably with terms like "unity" and "wholeness." Confusion, moreover, becomes worse confounded, as Plato points out, when we turn to the dispute going on between the materialists and the "friends of the Ideas." [41] The one will not hear of attributing existence to anything but sensible, tangible bodies; the other, on the contrary, maintain that the material world is mere "becoming" and motion, and

[40] 241 B.

[41] There is great diversity of opinion as to whom Plato is referring. The "materialists" are variously understood as (1) the Heracleiteans and perhaps Antisthenes (Raeder, *op. cit.*, pp. 326–327); (2) the Cynics generally (Natorp, *op. cit.*, p. 280); Melissus, who gave a materialistic twist to Eleatic doctrine (Burnet, *op. cit.*, p. 279); (3) the Atomists (Gomperz, *op. cit.*, II, Bk. V, ch. 17, § 2); (4) the hard-headed, materialistically minded "man in the street" (Taylor, *op. cit.*, pp. 384–385. *Cf.* Horn, *op. cit.*, II, pp. 318–319). Again, the "friends of the Ideas" are understood to be (1) Plato himself in the earlier doctrine of the Ideas set forth in the *Republic* and now recanted (Raeder, *op. cit.*, pp. 328 ff.); (2) Plato and the Platonists slyly criticizing their own doctrines (Gomperz, *op. cit., loc. cit.*); (3) those generally who believe in separate Ideas (Horn, *op. cit.*, II, p. 320); (4) the later Pythagoreans (Burnet, *op. cit.*, pp. 279–280; Taylor, *op. cit.*, pp. 385–386); (5) Plato's pupils in the Academy who misunderstood him and regarded the Ideas as metaphysical substances (Natorp, *op. cit.*, p. 284; Stewart, *op. cit.*, p. 87, note).

that true *being* is to be found only in "intelligible and incorporeal Ideas." [42]

Darkness, it is said, is deepest before dawn, and this proves true in the present case. The very extremity in which we find ourselves gives us the clue for escape. The "materialists," the dialogue continues, cannot be right, for if they were, we should be obliged to deny existence to the soul—that is, to life, and sensation, and thinking. The soul, to be sure, might possibly be regarded as material, but the moral and mental qualities that characterize her activities certainly cannot. And yet, virtues like justice and wisdom certainly exist, else the soul could not possess them. This the more moderate materialists would probably admit, in which case they would doubtless assent to a wider definition of "being," and be willing to attribute real existence to anything, material or immaterial, that possessed the power of affecting or being affected by something else. The "friends of the Ideas," however, would resist such a definition. They would distinguish sharply between the flux, in which our body is immersed, and the realm of true being in which the soul through her power of knowledge somehow participates, and would confine acting and being acted upon to the flux alone. Still, they must admit that when we think, not only is the soul active, but also Reality, which we are thinking about and knowing, is being acted upon. So in the end, they, too, would be obliged to accept the new definition.[43]

This definition, however, would seem to be involved in a pair of hopeless contradictions. In so far as Reality contains soul and mind and life, it must be an active, moving sort of being. In so far as it contains sameness and fixity, which knowledge demands of its objects, and without which neither it nor they could exist, it is at rest. Motion and rest, then, both exist in Reality. And yet, since the real existence of motion cancels that of rest and *vice versa*, it would seem as if any Reality that could contain them both must be a third thing different from both of them. But if Being is something different from rest and different from motion, it will itself be neither in motion nor at rest—which is absurd.[44]

[42] 241 B–246 C. [43] 246 C–248 E. [44] 248 E–251 A.

The answer now flashes upon us. There may be different kinds of being, all of which equally exist. Some of these kinds, to be sure, will not mix, like rest and motion, for example. But this does not mean that no kind of being can be predicated of another—a view maintained, as we have seen, by the Cynics. Many sorts of being, or in other words, Forms, can and do overlap and include one another. Thus, the Forms of a host of colors, and shapes, and sizes, and virtues, and vices, all "get together" without quarrelling in the Form of man. The situation is like that of letters or musical notes. They cannot be combined indiscriminately if we are to have words or harmonies, but that is not to say they cannot be combined at all. It is the business of the grammarian or musician to find out what combinations do make sense or music. In like manner it is the philosopher's job to discover what Forms do go together and are capable of entering into larger unities or of being subdivided in certain ways. The result will be a vision of "one Form pervading a scattered multitude, and many different Forms contained under one higher Form; and again, one Form knit together into a single whole, and pervading many such wholes, and many Forms existing only in separation and isolation." [45]

Out of this vision emerge certain broad categories or lines of intercommunication. We already have *being*, which can be both in motion and at rest, and *rest* and *motion*, which exclude each other, but are yet included in *being*. These three categories or Forms, however, are distinct. *Motion* and *rest* exclude one another, and though *being* includes them both, it is identical with neither of them. They are then all *different* from one another, and hence partake of the nature of *difference*, or "the Other," as Plato calls it. Nevertheless, they are self-identical, always the *same* Forms, and therefore also participate in the nature of "the Same." Thus we have two new, irreducible principles added to the first three, and get as a result five general categories or Forms that the mind cannot do without in its thinking—Existence, Motion or Change, Rest or Fixity, Sameness, and Difference. And yet, in a sense,

[45] 251 A–253 D.

each one of these categories *is not*, since no one of them can be identified with any other. Motion for example *is not* rest. Nor is it the *same* as Rest, though it is the *same* as itself, nor *other* than itself, though *other* than Rest. It is not even the *same* as *being*, and in so far as it is *other* than *being* it must be not-being, and yet it exists.

We are at last hot on the scent of the meaning of not-being and the possibility of error, which we have been hunting for so long. They are beaten out of the bush by the category of *difference*. We now see that by "not-being" we do not mean absolute non-existence but merely difference from the predicate or object to which the particle "not" is applied. For instance, if I say "motion *is not* rest" I do not thereby exclude motion from the whole of existence, but simply from that portion of it which is at rest. Motion *is not*, only in the sense of not being something other than itself. So too, if I say a thing is not beautiful or not great, I mean that it is *other than* beautiful or *other than* great. But the other-than-beautiful, the non-beautiful, or the other-than-great, the non-great, are as real as the great and the beautiful. For that matter they comprise all forms of existence except beauty and greatness. Even if we make the extreme and seemingly paradoxical statement that motion and rest, sameness and difference, the beautiful and the great are not being, I am after all only asserting that being cannot be defined in terms of those other Forms. "To be" is not necessarily "to move" or "to rest," "to be great" or "to be beautiful"; but "to move," and "to rest," etc., are not therefore vain sound and fury, signifying nothing. I am not opposing being to not-being but being to being. I am distinguishing existence in general from one of its specific forms, or one of these forms from another. Or, to put it in terms of logic, the opposition is not one of contraries but of contradictories. Rest, for example, is the contrary, or opposite, of motion. The two annihilate each other. But beauty or sameness are merely contradictories or negations of rest. They are not rest, but at the same time they can be present along with rest, or with motion. In the same way motion and rest, though they are not being, are its contradictories, not its contraries.

They can participate in or combine with it, although they are not it.

In short, the existence of the category of *difference* or *otherness* means that Reality includes and is composed of a variety of Forms. But, in its turn, the existence of multiplicity and variety means that "to be this" is the equivalent of, and is inseparable from, "not to be that." "Being and Otherness," then, "traverse all things and mutually interpenetrate." It is as much a part of Reality that motion should *not be* rest, as that rest should be rest, and motion, motion. Identity and difference are as necessarily not being as they are sameness and otherness. Range as we will through the universe, we shall always find that not being something else is the Siamese twin of being one's self, and that therefore all things "whether regarded individually or collectively, in many respects are, and in many respects are not." [46]

It makes, then, perfectly good sense to predicate "not-being" of "being," the Eleatics and the Sophists to the contrary, notwithstanding. For that matter, you cannot make sense—or a sentence—of any sort unless you actually do predicate of a thing something other than itself, something that it obviously is not. To say that different Forms do not mingle and unite is to deny the possibility of significant speech or thought. Discourse is saying something about something. Reduced to its simplest terms it must combine at least two things, a noun standing for an agent of some sort and a verb expressing an activity in which the agent is involved, even if that activity is no more than mere being what one is. Reciting strings of nouns, like "lion," "stag," "horse," or of verbs, as, for example, "walks," "runs," "sleeps," no more composes sentences than reciting jumbles of letters makes up words or combining Forms higgledy-piggledy gives rational concepts. A subject and a predicate are necessary.[47]

But, now, there are predicates and predicates, and two ways of asserting not-being of being. If I say of Theaetetus sitting here before me, "Theaetetus is sitting," I am predicating of him something that is not he, something that is not his being,

[46] 254 B–259 B. [47] 259 B–262 E.

since "to be Theaetetus" and "to be sitting" are different. But at the same time I am predicating of him a state of being or Form which, though other than he, is really combined with him at the present moment. Subject and predicate, then, are entertained in my thought in the same way that they are actually enacted in the object of my thought. My mental combination reproduces the real combination, and therefore my sentence has the quality of *truth.*

Suppose, however, I say "Theaetetus, to whom I am now talking, is flying." This, too, is a perfectly good statement. It combines a noun and a verb. It says something. It predicates quite properly something of Theaetetus that is other than he, and that is not his being, since "to be Theaetetus" is as different from "to be flying" as it is from "to be sitting." Furthermore, the Form of relative not-being predicated is combinable with his being, since there is nothing in the idea of Theaetetus as such that logically excludes the idea of flying. For that matter, if the dialogue had taken place to-day, Theaetetus would more likely have been flying than sitting and talking with the Eleatic stranger. So far, then, we have a statement quite as sound and logical as the proposition "Theaetetus is sitting."

But, and there's the rub, this time my thought is attributing to the subject a predicate with which it is not actually united at the time I make the statement. I am combining with Theaetetus a Form that is not combined with him in his present state of being—a Form, indeed, that contradicts his condition here and now and is excluded from it, since at the moment he is *not* flying. In other words, I am no longer predicating not-being of being in the innocent and necessary sense of attributing to a thing qualities that are "other than" and therefore "not" itself, but still are Forms its being takes on. I now predicate of the thing qualities it does not possess, and attribute to it Forms "other than" itself that are also not Forms of its present mode of existence. I speak "of things which are not as if they were," and say "that things are real which are not." This, however, is to treat something *different* from the situation as if it were the *same* as the situation (thereby combining the

categories of *sameness* and *difference* which exclude each other). And it is to assert a non-existent combination of Forms as if it were existent (although "not" means "other than"). But if the essence of truth lies in combining Forms in thought and discourse as they are combined in reality, to combine them otherwise is other than true. Hence, when sameness is asserted as difference, and not-being as being, "such a combination of nouns and verbs is really and truly false discourse." [48]

The hunt is now at an end and we are in at the kill. We have discovered what error is, and how it is possible. And since opinion is merely a kind of silent affirmation or denial by the mind, and imagination but a union of sense and opinion, it follows that if statements can be false, opinions and images may likewise be so. We may properly then convict the Sophist of being an artist in false imagery. Furthermore, having so convicted him, we may revert to our old process of classification by division, and place him still more narrowly. Creation is of two sorts, human and divine. God alone creates natural objects and images, like the elements and animals, and their shadows and reflections. Men are engaged with artificial creations and with imitations. And some of their works are founded upon knowledge and science, and some upon ignorance, or, at the best, mere opinion. Again, some ignorance may be honest, but some may suspect and be ashamed of itself, and try to dissemble itself by pretending to knowledge and by involving others in self-contradiction through mere word-juggling. Ignorance of this sort is characteristic of sophistry.[49]

The *Sophist*, as we have just outlined it, bristles with interesting and important logical and metaphysical points. To logic it contributes not only the method of definition by division but a profound and thoroughgoing discussion of the nature of predication and of significant negative judgments, and the first sharp and argued distinction between the use of "is" and "is not" as copulas attributing or denying predicates to a

[48] 263 A–263 D. *Cf.* Raeder, *op. cit.*, pp. 333–337; Natorp, *op. cit.*, p. 294; Burnet, *op. cit.*, pp. 287–289.

[49] 263 D–268 D.

subject, and their use as affirmations or denials of existence.[50] Metaphysically considered, the dialogue is no less striking. The doctrine of the *Parmenides*, that the existence and unity of the Ideas must be so conceived as to allow them to partake of each other and enter into larger systems without losing their identity, is expanded and supplemented. We are given a detailed study of how and under what conditions inclusion and intersection are possible. In the course of this study we are introduced to five of the widest and highest categories, or ways of getting together, that determine the combination of the more specific Forms, govern the processes of thought, and constitute, so to speak, the bed-rock of Reality. The existence, it may be remembered, of these greatest, all inclusive Forms of community, had already been touched on in the *Theaetetus* in developing the theory of knowledge.[51]

But the metaphysical results are not confined to a more completely developed specification and interrelation of the Forms of true *being*. Light is also thrown on the realm of *becoming*, and of what has heretofore figured rather vaguely as *not-being*. We have seen the part played by the soul in the *Republic*, *Phaedo*, and *Phaedrus*, and in the *Theaetetus* with its tacit recognition of the fact that, in spite of Eleatic arguments to the contrary, life and change and activity are not illusory, but are part and parcel of Reality. This recognition now becomes explicit. It is impossible, we are told, to believe "that life and motion, and soul and mind are not present with perfect being," or that "being is devoid of life and mind and exists in awful unmeaningness, an everlasting fixture." Nay more, the power of acting and being acted upon, displayed both in the motion with which the soul inspires the corporeal world and in the intercourse of the soul with the Ideas in the incorporeal realm, might seem to be the common characteristic and uniting link of both worlds and the quality we have in mind when we "say of both of them that they are." In fact, we might confidently define *being* in dynamic terms as simple power.[52]

[50] *Cf.* Burnet, *op. cit.*, pp. 286 ff.; Taylor, *op. cit.*, p. 392.
[51] Theaetetus, 185.
[52] *Sophist*, 247 D–E.

And, as we have seen, the source and seat of power is the soul.

This belief in the reality of the changing, living aspect of the universe is confirmed by the exaltation of motion—the essence of the sensible world—to the position of one of the highest and most general Forms of pure being. In like manner, the argument in the *Parmenides* that the One is meaningless without the Many, and *vice versa*, is clinched by a similar exaltation of the category of *otherness* and by the assertion that *difference* is inseparable from *identity*. This, of course, may be applicable only to the relations of the Ideas to each other and to the Form of the Good, but it is hard to see why it should not also be pertinent to the relation that the sensible particulars bear to each other within the unity of the Idea. In that case the being of sensible objects would not be entirely exhausted by and confined to the fixed and invariable nature they share in common. Their separate individualities, their variations, and their differences from one another and from the standard Form would be as real as the universal and changeless types exemplified in their shifting, parti-colored lives. The one without the other would be meaningless. All in all, then, here, as in the *Parmenides*, it is not surprising that some critics have felt that Plato is protesting against those who would divide his single Reality into two contrasted worlds of Being and Becoming, having nothing in common, and opposed to each other as absolute truth to sheer falsehood and nonentity.[53]

If this be in Plato's mind, his logic of significant denial and of the meaning of the particle "not" illuminates the shadowy recesses of the principle of not-being, between which and the realm of true being, we are told in the *Republic*, the world of becoming hovers. If "not" does not indicate non-existence, but means merely "other than," the principle opposed to the absolute being of the Ideas, far from being blank nothingness, may simply stand for a different kind of being. The sensible world, then, is not a mixture of Reality with sheer unreality. That in it which is not Form is not therefore nothing at all. As a matter of fact, life, and mind, and soul, since they are not the

[53] *Cf.* Stewart, *op. cit.*, p. 87.

Ideas, belong logically speaking in the sphere of not-being. But it is not of them that Plato is thinking. In any case they would not exhaust the realm of not-being, for to account for the sensible world something more is necessary than the Forms and an enacting principle or power. There must be a medium in which the Forms are enacted, something that gives "body" to them and to the activities of soul. In short there must be a *matter* of some sort if we are to have a corporeal world, and it is to this material principle, as distinguished both from the Forms and from soul, that Plato means the term "not-being" particularly to apply. This matter is no less existent than the Ideas. Just what it is we have not yet been told. But in a moment we shall find the question taken up in the *Timaeus*.

As it is, however, our universe is now pretty definitely outlined. On the one hand we have the System of Forms culminating in the Idea of the Good, on the other a material substratum in which that system is embodied. Between these two extremes we have a dynamic, enacting principle, *soul*, and a world of sensible objects which arises from the mixture of Form and Matter she effects. Or to run down the scale in order we have the Good, the Forms, Soul, the Sensible World, and Matter. But this is not quite all. Within the realm of Soul a division is foreshadowed and a new figure is appearing. Throughout the Dialogues Plato has constantly rejected blind necessity or chance as the reason for the existence of the sensible world or as characteristic of its behavior, and has as constantly invoked an intelligent cause acting in accordance with a purpose. Sometimes this cause is identified with the Idea of the Good,[54] sometimes it seems to be found in the Idea itself,[55] and sometimes in "God," a being who has from the beginning moved familiarly in Plato's pages, but mysteriously and vaguely, without metaphysical character or a definitely assigned place in the Platonic system. In the *Sophist*, however, an intelligent Creator is reaffirmed, is identified with God, and by implication, at least, is located in the life, soul, mind section of Being.[56] Coming events, as we shall soon see, are already casting their

[54] *Rep.*, 517–C. [55] *Phaedo*, 97 A–101 D. [56] *Sophist*, 265 C–E.

shadows beforehand.[57] But here again, as in the case of matter, we must wait till we come to the *Timaeus*.

Another fourfold scheme of Reality is set forth in the *Philebus*, a dialogue which we have already discussed in part in connection with Plato's ethics. There, we may remember, we have the Indeterminate, the Determinate, the Mixture of the two, and the Cause of the Mixture. The Indeterminate is the principle of the more or less, the higher and lower, the swift and slow, in a word, of the multiplicity and variation in the world.[58] The Determinate or "Limit" is the principle whose application to the indeterminate gives rise to a given, definable quality or quantity, and thus produces and maintains a persistent, namable state of being. And the result of this production—a process, incidentally, that is nothing but our familiar process of becoming [59]—is the third class, the Mixture, in which the wildness of the flux is tamed and transformed into a stable and orderly structure.[60] Finally, we are told, the Cause of the coming together of limit and the unlimited is not chance or unreason, but a "marvellous intelligence and wisdom," inherent in a supreme living soul, the mind and soul of Zeus.[61]

At first sight it looks as if this scheme might neatly cap, point by point, the system emerging in the *Sophist*. The Indeterminate would seem to coincide with the material principle, and the Determinate with the Ideas. The Mixture is the structure of the sensible world, and the Cause of the Mixture is God. And such an equivalence has been accepted by some critics.[62] But unfortunately for our peace of mind it is rejected by others, and we find ourselves in the midst of another Platonic controversy.[63] The Indeterminate, it is argued, cannot be confined to the material principle, or the Mixture to the sensible

57 Burnet, *op. cit.*, pp. 289 ff.

58 *Philebus*, 24 A ff., 26 A.

59 Stewart, *op. cit.*, p. 96.

60 *Philebus*, 25 D–26 D.

61 *Philebus*, 28 C–30 D.

62 *Cf.* Zeller, *Plato*, p. 264, note 111, for references and discussion.

63 *Cf.* Robin, *La Place de la Physique dans la Philosophie de Platon*, p. 34; *Théorie Platonicienne*, p. 590; Stewart, *op. cit.*, pp. 98 ff.; Natorp, *op. cit.*, pp. 305 ff.; Raeder, *op. cit.*, pp. 320 ff.; Jackson, *Journal of Philosophy*, X, 253 ff.

order, since the Forms themselves reveal on closer examination a certain indefinite and mixed streak. They are simply what they are, and nothing else, to be sure; but at the same time, without losing their separate identities they can both partake somehow of one another's natures, and also exemplify the same definite character in a thousand individual objects. Human nature, for example, is displayed in all sorts and conditions of men. And although it is a different Form from that of the biped or the animal, with its own unalterable character and definition, it can nevertheless be logically subsumed under and partake of these other essences. The Forms, then, it is pointed out, are combinations of unity and plurality, definiteness and indefiniteness, and must be placed in the third or "mixed" class of being.

But there are also critics who, while arguing that the Forms are not to be identified with Limit, refuse to assign them to the mixed class. Some of these find the true home of the Ideas in the fourth division and regard them as the Causes of the Mixture,[64] whereas others have maintained that the fourfold scheme is not meant to include the Ideas, and that they stand outside of it altogether.[65] Again, just what Plato meant by the "intelligent cause" has been warmly debated. The divine nature and kingly mind and soul of Zeus is obviously mythological and not to be taken too literally.[66] But is it a figurative expression for a divine, creative power attributed to the Ideas, which form the sensible world in their own image?[67] Or does it symbolize pre-eminently the Idea of the Good considered impersonally as the rational nature and unity of the universe as a whole, which is expressed in a harmonious system of interrelated laws and forms and is enacted in a spatial and temporal medium through the agency of soul?[68] Or are we to credit Plato with a quasi-personal Creator, perhaps mystically identified with the Idea of the Good, or perhaps conceived as a sort of king of souls existing apart from all the Forms including

64 *Cf.* Zeller, *Plato,* pp. 262 ff.
65 Taylor, *op. cit.,* p. 417.
66 *Philebus,* 30 D.
67 Zeller, *op. cit.,* p. 267, note 114.
68 *Cf.* Stewart, *op. cit.,* pp. 96, 99 ff.; Natorp, *op. cit.,* pp. 329 ff.

that of the Good, and looking to them for the inspiration and pattern of his work?[69] These are unsolved and perhaps insoluble problems. We shall find them raised even more sharply in the *Timaeus*, and we had best take our final leave of them there.

[69] *Cf.* Taylor, *op. cit.*, p. 416; Burnet, *op. cit.*, pp. 336, 337.

## CHAPTER XI

## THE IDEAS AS MATHEMATICAL FORMULAE

### I

We ought, it might seem, to pass at once to a discussion of the place of God in the Platonic system. But before doing so, one question remains to be considered, the discussion of which leaves us with probably the clearest and the least debatable impression to be carried away from the *Philebus*. Just what does Plato mean by "limit"? A suggestive answer is that he is seeking to express and explain the fact that in spite of being both "mixed up" with one another and included in one and the same rational world-order, the Forms have each a separate individuality and nature, determinable with absolute precision, which makes exact or "scientific" knowledge of them possible.[1] Thus, to choose a modern example, the astronomical Forms, or laws, of planetary motion that planets enclose equal areas in equal times, and that the squares of their periodic times are proportional to the cubes of their distances from the sun, are all "mixed up" with the law of gravitation and the laws of motion generally. But, at the same time, they can be stated without stating those other laws. They have their own separate and precise formulae, which are not the formulae of gravitation or of motion in general, and by these they are "limited" and determined to be the laws they are.

But how is such clear and distinct determination of each separate Form possible? The answer to this question gives us perhaps the key that best unlocks the dialogue—a key incidentally that we went so far as to finger and fit to the lock, when in discussing the ethics of the *Philebus* we remarked upon Plato's attempt to formulate the harmony of the moral life

[1] *Cf.* Stewart, *op. cit.*, pp. 98 ff.; Natorp, *op. cit.*, pp. 305 ff.; Raeder, *op. cit.*, pp. 370 ff.; Jackson, *Journal of Philosophy*, X, pp. 253 ff.; Robin, *Théorie Platonicienne*, p. 590.

as a "specifically determined mathematical ratio." [2] Absolute accuracy of definition—that is, precise *limitation*—is attainable only by the use of the mathematical method and in mathematical terms. The Forms, to fulfil the requirements of absolute determination, must be stated as *formulae*. To get at the real nature of a thing we must get the thing's measure in mathematical terms. Until we have found its *formula* we have not found its Form. Now Limit is just the principle of formulation. It sums up the concepts and processes of mathematics which enable us to weigh and measure and arrive at exact results. Without it the Forms could not be distinguished, nay, could not exist; for without precision and measurableness the universe would have no articulate structure and would offer no handhold to reason and science.

This reduction of Forms to formulae and this statement of the natures of things in mathematical equations, with which Plato has become so engrossed, are commonplaces of modern thought. It is his way of getting at the reduction of all qualitative to quantitative difference which, until very recently at least, has been the alpha and omega of modern science. To be sure, concepts like the quanta-theory and the theory of relativity have begun to shake our faith in the fixity and absoluteness of quantitative standards. But for all practical purposes measurement in quantitative terms may be regarded as yielding the maximum of precision, and as giving us the formula that is a thing's Form, scientifically considered. Take for example a familiar thing like water. Its nature or Platonic Idea is stated by the formula $H_2O$. The H and the O must be there to be sure, since other elements combined in the same proportion would give other substances. But once the elements in question are given, it is the 2 that is the determining factor, since any other proportion of hydrogen and oxygen would leave us, not with water but with something else. So far, then, as hydrogen and oxygen are concerned, the Form of water depends upon and is expressed by the 2. Again, the components of these elements are seemingly identical—qualitatively similar electrons (making due allowance for the quanta-theory again)

[2] Taylor, *op. cit.*, p. 417.

revolving about qualitatively similar nuclei. But the hydrogen atom has one electron, the oxygen, eight. Hence the difference between them is expressible purely as a difference of number, or, at the most, of number and geometrical arrangement. Their distinctive Forms, in other words, are stated as matters of arithmetic or geometry.

Again, passing to the less calculable aspects of Reality, we find that so far as they can be brought within the sphere of knowledge it is number that does the trick. They are really *understood* only to the extent that they are amenable to formulae. The economic activities of man can be partially expressed in equations and curves, and to that degree we have economic law and a science of economics. The stream of his consciousness has been in part subjected to measurement in psychological laws, and a monumental attempt has been made by the Italian scientist and mathematician, Pareto, to work out formulae that will cover all social activity.

Or take a so-called imponderable value like beauty. It is something felt, worshipped, yearned for—something that touches and satisfies other interests besides that of knowledge. But the soul is not content merely to experience the thrill of its caress and remain in the dark as to its true Form. Endowed as she is with the curiosity that is the beginning of wisdom, she desires like her namesake, Psyche, to see the figure of her beloved by the light of reason, revealed stark naked for what it really is. This she can only do by "figuring out" in numerical terms the mathematical proportions involved in the harmonies of sound and line that so charm the senses. We know, for instance, that the perfection of the Parthenon is in part conditioned by a proportion of length to breadth as 9 is to 4, and by a specific amount of curvature in the base on which it rests and in the entasis of its columns. It is these ratios that express, in part at least, the final formula or Form of architectural beauty, so far as that beauty can be made an object of reason and science—in other words, so far as it can be *known*, as well as felt or desired. Or finally, consider moral values. They, too, would be classed as "imponderable." But they must have their weighable, accurately expressible side if

we are ever to *know* what the good really is, and have a scientific or rational ethics rather than one founded on emotion or mere say-so, unsupported by "good" reasons for the conduct prescribed. And here again the secret of the good life will be revealed in the mathematical *proportion* in which its ingredients are mixed—a proportion that we not so long ago found Plato trying to determine.

To put it in a nutshell, the limiting or determining principle which outlines the different Forms and gives each its specific or distinctive characteristics is number, and our slang phrase "I'll get your number," with which we threaten the discovery and exposure of the real truth about a thing, is excellent Platonism. And if this be what the *Philebus* is trying to express, its meaning is clear. Plato is simply grasping and stating in the terms at his command the ideal and method of all science and the *sine qua non* of the highest and soundest knowledge that reasoning can attain. From this vision of the possibilities of mathematics he has drawn a new inspiration regarding the Ideas. Or, at least he is now stressing aspects that heretofore have not been prominent.[3] It is not merely that ethics can be handled like geometry. All real being is determinable and describable with mathematical precision.

Plato's faith in mathematics is also prominent in the *Laws*, where astronomy seems to be regarded as the highest science.[4] In the *Epinomis* it is pushed to an extreme point. This dialogue, which carries on the thought of the *Laws*, has long been under suspicion, but there seems to be a strong tendency to-day to regard it as genuine.[5] Its subject is wisdom, the crowning science, which, through a process of elimination, is finally found in the knowledge of number. Such knowledge, we are told, is in very truth a gift from heaven, and is itself the giver of all good things to man and the indispensable condition of a godly, sober, and righteous life.[6] This, if genuine, is the last word we have of Plato's, and its exaltation of number, backed as it

3 Raeder, *op. cit.*, p. 412.
4 *Laws*, XII, 966 D–E.
5 *Cf.* Raeder, *op. cit.*, pp. 413 ff.; Taylor, *op. cit.*, p. 497.
6 *Epinomis*, 973 B–978 B.

is by the position assigned to mathematics in the *Laws*, has led some critics to ask whether he did not end by substituting higher mathematics for dialectic itself.[7]

II

This seeming conviction that all Forms can be stated as mathematical formulae, nay must be so stated before the mind can sincerely say it really *knows*, would seem to throw considerable light upon Aristotle's assertion that Plato actually conceived the Forms themselves as numbers. It was not that there were Forms of numbers as well as of other things. The Forms of all things were essentially numerical—so that the same elements as established the nature of arithmetical and geometrical entities were also the ultimate Ideas or types to which cat, or dog, or table, or what not could be reduced. Plato also interposed between the Forms-as-numbers and the sensible world an "intermediate" world of so-called "mathematical objects," and held that whereas the mathematical numbers were capable of addition, the Idea-Numbers were not. Thus we seem to have two kinds or orders of numbers on our hands, one of which appears singularly incapable of dealing with even the simplest processes of arithmetic. And finally, we are told that Plato talked of an "indeterminate dyad" or duality (which Aristotle, and perhaps even Plato, is prone to confuse with the Number-Form of two [8])—a principle of plurality, whose combination with unity produces the even numbers by multiplication, the odd when the number one interferes with and stops its propensity to multiply.[9]

That these are trustworthy statements of Plato's real teaching is generally conceded. But that Aristotle did not altogether understand what Plato was driving at, and misrepresented the doctrine in his criticisms of it, is also widely held.[10] The sub-

[7] *Cf.* Raeder, *op. cit.*, pp. 412, 416, 418, but *cf.* to the contrary Taylor, *op. cit.*, pp. 497, 501.

[8] *Cf.* Taylor, *op. cit.*, p. 512.

[9] *Cf.* Aristotle, *Met.* XIII, 1080*b* 11*b* 999*a* 9, I, 987*b*, 14, 1002*a* 15. *Cf.* Taylor, *op. cit.*, p. 512.

[10] *Cf.* Robin, *Théorie Platonicienne*, pp. 422 ff.; Natorp, *op. cit.*, pp. 399 ff.;

ject presents one of the most obscure and difficult of Platonic problems, and any adequate discussion of it would be too long and intricate and would lead us too far afield into the history of Greek mathematics. We have only time to record briefly a few suggestions made by modern scholars. In the first place, we are warned not to regard the doctrine that the Forms are numbers as a last-minute change or senile vagary of the Platonic philosophy. It was already being taught by Plato at the time Aristotle entered the Academy,[11] and it is all of one piece with the thought of the later dialogues, particularly with that of the *Philebus*.[12] What Plato was trying to do was to lay hold of the ultimate mathematical entities which must figure in all formulae and equations, and therefore in all Forms. Incidentally, he was on the road to the discoveries which have enabled modern mathematics to deal with "irrational numbers" and treat arithmetic and geometry as parallel aspects of a single science of number.[13] And, had algebra only been known in his day, he very likely would have found what he wanted in algebraic symbols and equations, which would have enabled him, as they have enabled modern thinkers, to push the reduction of all qualitative differences to differences of quantity to its veritable limit, and to construct even an algebra of logic by expressing purely logical relations in mathematical formulae.[14]

As it was, he did the best he could with the materials at his command. So far as he could see, the ultimate Ideas that gave definite existence to any and every Form whatsoever and made it a possible object of knowledge and science were essences such as oneness and twoness and threeness, circularity, triangularity, squareness, and the like. For example, the Form of the biped and of all Forms falling within it, including that of man, could

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Stewart, *op. cit.*, pp. 107 ff. But *cf.* also Jaeger, *Aristotles*, pp. 181 ff.; who thinks Aristotle's criticism is directed against misrepresentations of Plato by Speusippus and Xenocrates.

11 *Cf.* Taylor, *op. cit.*, p. 504; Burnet, *op. cit.*, p. 313.

12 Stewart, *op. cit.*, p. 118; Taylor, *op. cit.*, p. 514.

13 Taylor, *op. cit.*, pp. 504, 505.

14 *Cf.* Natorp, *op. cit.*, p. 420; also Stewart, *op. cit.*, p. 117; Robin, *op. cit.*, p. 586.

not exist were it not for twoness. Again, to go back to our old instance, without twoness the Form or nature of water, $H_2O$, would be impossible. And there could be no hydrogen, with its *one* electron *revolving* about a nucleus, unless oneness and circularity existed. So, too, there could be no such nature as oxygen, with its eight electrons, if there was no such thing as eightness. Nor could we construct an economic curve without curvature. Nay, more, if the beauty of the Parthenon be in part due to the fact that its length is to its breadth as 9 is to 4, then nineness and fourness, not to speak of an oblongness to lend itself to that proportion, are indispensable conditions of a formula or Form of beauty.

There is much then to be said for the position that the theory of Ideas as numbers is not an unforeseen twist in Plato's thought. It is rather a confirmation from Aristotle's lips of what we have already suspected to be the true meaning of the *Philebus*. It is no flight of fancy but the profoundest common sense. Plato has found at last the least common denominators of the whole formal side of Nature. The Ideas of number are the "limits" and determinants of every measure and every formula, but they are not limited and defined by anything beyond themselves. They are not subject to further formulation, and can be stated only in their own terms. For instance, if we are asked, "What is the essence of the number three?", we reply, "Threeness." But if we are then asked, "But what is the essence or nature of threeness?", we can only answer, "Just threeness and nothing else." So, too, circularity is the essence of the circle, but it is its own essence also. We have come to a full stop. The basic Forms, the ultimates of our thinking and the final frames of all existent things, are then actually Number-Forms,[15] or as we should perhaps say to-day, algebraic Forms. It is they that underlie and rationalize the idea and application of quantitative measurement, just as quantitative measurement, or in other words *formulae*, stated in terms of oneness and twoness, *a*-ness and *b*-ness, enables us to find definite Forms in an otherwise chaotic flux of unordered qualities. It can be said, then, that these supreme

[15] *Cf.* Taylor, *op. cit.*, p. 507; Burnet, *op. cit.*, p. 319.

Number-Ideas stand in much the same relation to the other more specific Ideas as the latter stand to their particular sensible instances.[16]

Now, paradoxical though it may seem at first sight, these Number-Ideas, for all that they are the basic Forms of mathematics, are really, as Plato pointed out, themselves not capable of mathematical manipulation. They cannot be added, subtracted, multiplied or divided.[17] Nor can they be superimposed or juxtaposed, intersected by or included in one another. This, however, is not so odd or startling as it appears. For example, although one circle can intersect another, it is obviously nonsense to talk of one circularity intersecting another circularity. For circularity is the Form or nature of all circles whatsoever, and there is only one such Form or nature. Or again, although we can inscribe a triangle in a circle, circularity, or the definition of a circle, does not therefore include triangularity or the definition of a triangle. Nor could triangularity be described by giving the definition of an angle thrice over. The same is true of the arithmetical Number-Forms. Although $2+2$ or $2\times2=4$, it cannot be said that twoness, or the nature of the number two, multiplied by or added to another twoness gives us the nature or Form of the number four. In the first place there are not two twonesses to add or multiply. The number two has not two Forms but only one. As well speak of two human natures, or two essences of justice, or two laws of gravitation or acceleration, as of two concepts or definitions of two. And so with fourness. It is not the Form of the number two given twice, or the definition of three followed by that of one, or four statements of the nature of the number one. It has its own particular nature and specific definition, which cannot be mathematically compounded of or resolved into the definitions of anything else.

In other words, the Number-Forms are, strictly speaking, not mathematical entities at all. They are the logical essences

[16] *Cf.* Stewart, *op. cit.*, p. 318; Robin, *op. cit.*, p. 590.

[17] The following discussion of "addible" and "unaddible" Numbers and of the Indeterminate Dyad is based upon Cook Wilson, *Classical Review*, Vol. XVIII (1904), pp. 247 ff.; Burnet, *op. cit.*, pp. 317 ff.; Taylor, *op. cit.*, pp. 503 ff.; Robin, *op. cit.*, pp. 585 ff.

or natures of these entities. Although the Forms of quantity, they are themselves not quantitative but qualitative, and, although the Ideas of number, they are not figures but abstract characters. In this respect, they are on a par with Forms like justice or tableness or what-it-is-to-be a man or a horse. In the heaven in which they dwell there is no entering into mathematical or quantitative marriages. It would be as absurd to say that fiveness is bigger or heavier than fourness, as that the Idea of the elephant weighs more, or is more bulky, than the Idea of man. Threeness can be as little subtracted from fourness, circularity can as little intersect circularity, as justice can be multiplied by the Form of the bed, or the nature of the quadruped be divided by or subtracted from the nature of the dog or the horse.

Such entities, to be sure, are in logical relation, and may be subsumed under and participate in one another. Thus we cannot define what-it-is-to-be a semi-circle or a segment without reference to the Idea of circularity, or what-it-is-to-be-one-half without reference to the Idea of the unit. But this is quite different from making the Idea of the semi-circle or the segment a mathematical fraction of circularity, or saying that it is lighter or that it occupies less space than the more inclusive Idea. So, here again, when Plato speaks of the Number-Forms as "unaddible," he is making the best of sense.

But if the processes of mathematics do not deal in things like threeness and circularity, what is their stock in trade? Certainly their business is not retail but wholesale. They are not concerned directly with trading in particular objects. If I add 2+2 it makes no difference to me whether I am adding two men to two men, or to two dogs or two tables. In any case 2+2=4. Moreover, 1 man + 1 table + 1 good deed + 1 thing of beauty are not a mere enumeration of different articles. They add up, enter into a mathematical group, and form, in spite of their different species, a real arithmetical sum total. In other words, mathematics do not deal directly with two *this* or two *that*, or with this square or that circle. Their immediate concern is rather with "any old" square or "any old" two whatsoever. This "any old" two or square

is, to be sure, a generality of sorts. It is as applicable to all twos and squares and is as eternal and invariable as twoness or squareness. But at the same time it is not abstract but concrete. The mind handles it like an individual *thing*, not like a general concept or Idea. "Any old" two is still *a* two, not *the* two. "Any old" square is still *a* square, not *the* square. In dealing with things like a pair or a circle we are still dealing with a *particular* number or shape, even though we have not in mind any particular thing to which the number or the shape in question is referred. Our stock-in-trade, in short, is not Forms but figures.

Now these figures, unlike the Forms, can be added, subtracted, multiplied, divided, and the like. Any two + any two, or × any two = four. Any circle can intersect another circle. Hence, besides the "unaddible" Number-Forms we have, as Plato says, a system of "addible" numbers, or of "mathematical objects" as he also calls them. Moreover, this system is, as he maintains, "intermediate" between the "unaddible" Ideal Numbers and the world of sensible objects. The Number-Forms make counting possible. It is the concrete objects that are counted. But it is the "addible" numbers—the mathematical entities of which our written figures and diagrams are the symbols—that do the counting. Twoness and two objects are linked together by the numeral 2. Between circularity and its concrete examples comes the circle of our geometry books, as fixed and as universal in its application as circularity, but unlike circularity divisible into segments and yearning to be squared.

For that matter, the "addible" numbers, which are the objects of mathematics, would seem even to mediate between the Ideal Numbers and the other Ideas, since Forms, although they cannot be integrated or said to be *mathematically* larger or smaller than one another, are nevertheless many and can be counted. There is a "number" of types and laws and values, just as there is a "number" of concrete objects. Though four statements of the definition of oneness do not make fourness, they do make 4.

We see now what Plato may have meant by distinguishing

two sorts of numbers, the ideal and the mathematical, and by contrasting them as respectively "unaddible" and "addible." And we can see what was in his mind when he described the "addible" mathematical numbers as existing "in between" the Number-Ideas and individual things. But we are confronted with a new difficulty. Although the Ideas of numbers and of geometrical figures cannot be derived from one another by mathematical manipulation, the numbers and figures themselves can. And obviously they come into being through some sort of extension or repetition of the number one or of the geometrical point. Two is two ones, three is three ones, four is four ones and so on. The point builds itself into the line. Lines somehow lay themselves down side by side to form planes, and planes place themselves against one another to form solids. But how can the number one be made to repeat itself and produce other numbers? How can a point be seduced into the reiteration necessary to generate a line? This is a crucial question with ramifications of vital importance. It asks not only how such fundamental operations of mathematics as addition, subtraction, multiplication, and division can take place at all, but also how there can be a sensible world physically extended in space and time. And more generally speaking it raises the metaphysical problem of the possibility of deriving the Many from the One and relating them to it.

The answer to this question is by no means easy. We have already noted the metaphysical sterility of the concept of sheer unity. Mathematically considered it is no less barren. Taken alone, just a number one or a point cannot account for a number two or a line. It cannot reproduce by fission. It cannot fertilize itself. It must impregnate or be impregnated by something from without. But where is this something to be found? Plato answers, in the indeterminate dyad or duality, which he also significantly calls the-great-and-the-small.

What, however, is in this name? It suggests to us, as it did to Aristotle, the nature of the number two, or twoness. And it must be said that Plato himself was probably not always clear on this point and left the way open for misunderstanding. But if this is what he really meant, the whole theory of num-

bers will prove as untenable as Aristotle thought it was, and the criticisms passed upon it in the *Metaphysics* are valid. For, as we have seen, the Forms of numbers are mathematically impotent, and the union of the concept of twoness with the number one would bear no fruit, nay, cannot take place. It would leave us, not with the number two but simply with the Form, twoness, *and*, or *plus*, the number one, uncombined and unintegrated. Indeed, it could not even do that, since, before we can even say *and* or *plus*, or have a copula of any sort, we must first have two things to unite and therefore the number two before us. To identify, then, the expandable and contractile nature of the indeterminate dyad with twoness would bring to naught what otherwise might well seem one of the highest and soundest flights of Plato's genius.

Confronted with this difficulty, and unwilling to believe Plato capable of so great a fall at so supreme a moment, modern critics have seen a great light. If only, we are told, we will identify the indeterminate dyad not with twoness but with *twiceness*, everything becomes relatively clear.[18] Twiceness is not a Number-Form any more than "twice" is a number. It is not a "limit," not a measure, not a quantitative determinant. It is not a stop-signal, which halts mathematical trafficking at definite numbers. It is rather the go-signal, expressive of *plus* and *minus*, *times* and *divided by*, *greater than*, and *smaller than*, which enables mathematics to proceed from number to number and establish measures and formulae.

Now *twiceness* can be applied to "any old" one with an immediate and fruitful result. It adds an *s* to it and puts it in the plural. Twice one is two *ones*, and we actually have the desired number two. And again combine twice with two and we have $2\times2$ or $2+2$ or 4; with four, and we have $2\times4$ or 8.[19] By the agency of twiceness, then, all the even numbers may be generated from the number one and trace their descent back to it.

The derivation of the odd numbers was of course more com-

[18] *Cf.* Cook Wilson, *loc. cit.*

[19] We must of course remember that Plato had not the Arabic system of numerals, and could not therefore express his thoughts by means of them.

plicated. Plato, we are told, said they resulted from the "equalizing" or "stabilizing" of the dyad or the-great-and-the-small by the number one. By this, it has been suggested, he means that the number one steps in, as it were, between two even numbers to form their arithmetical mean.[20] Thus if one steps in between two and four and constitutes their mean term we get three; if between six and eight, seven appears upon the scene. Here twiceness inverts itself and becomes a principle of division. 6+8=14, and 14 combined with twiceness inverted, or one-halfness, gives 7.

Seen from this point of view, the indeterminate dyad may be regarded as an attempt to bring the mere and rather blank indeterminate or unlimited of the *Philebus* into the mathematical fold, and to define its function and place in the universe in mathematical terms. The formal side of existence had already been so treated, and it was necessary to subject also the non-formal, material, "not-being," aspect of Reality to the same process, if a mathematical formulation of all being was to become an accomplished fact.

Of great importance to this attempt, and most significant of the train of Plato's thought, was his redefinition of the indeterminate, not only as the dyad, but as the-great-and-the-small. The latter concept we are asked to regard as a method of dealing with the problems of indefinite divisibility, infinitesimals, and "irrational" numbers, and as evidence that Plato was on the road to the modern theory of the *continuum*, in which number is represented, not as a sequence of separate, hard-boiled units, but as a soft-boiled, continuous, unbroken flow from zero to infinity. And his geometry, it is further argued, was similarly oriented. He was getting away from the concept of the point as a unit that has position, and of the line as produced by a repetition or succession of such units—concepts originating in the attempt of the Pythagoreans to apply arithmetic to geometry, and apparently still held by some members of the Academy. The point was rather to be regarded as the "start of a line" which was generated not by repetition but by a process of continuous, creeping extension or "fluxion."[21]

[20] Taylor, *op. cit.*, pp. 512, 513.

[21] Taylor, *op. cit.*, pp. 505 ff.

And this train of thought would inevitably lead to a consideration of the plane as generated, not by a re-laying, but by a dragging or a pushing of the line, and of the solid as built up out of the plane by projection rather than by superimposition. The final consequence of such a treatment of geometry would be that both it and arithmetic would flow together and merge in the concept of the *continuum*, on whose stream both are carried. Thus they would lose their distinct and sometimes apparently antagonistic characters, and might take on in Plato's eyes their very modern appearance of parallel aspects of a single science.

The indeterminate, so far as it is an element of the Forms themselves, is also susceptible of interpretation along these lines. Not only is it the condition of a plurality of Forms, but the multiplicity it gives rise to in the world of essences has a continuity not unlike that of numbers. So far as we reason closely and consecutively, we do not jump from Idea to Idea but glide from one to another without shock or jar through a continuous series of middle Forms or terms. And the logical method of definition by division, upon which Plato lays so much stress in the *Sophist*, is akin to the mathematical process of convergence upon an irrational number, like $\sqrt{2}$ for example, by the use of continued fractions. By the segregation of more specific within more general Ideas we close in upon the specific Form by bracketing it, as it were, more and more narrowly, till we have excluded from it everything that is not its proper essence; just as we approximate to our irrational number by a progressive reduction of the values that are greater and smaller than the one in question.[22]

If the suggestion that in this doctrine of the indeterminate dyad Plato was reaching towards a concept of the *continuum* be correct, he had certainly gone very far towards finding a least common denominator for all the aspects of the non-formal, "not-being," material side of existence. "Fluxion" was already the principle of the flux, of movement, change, and becoming. It became now the principle also of numerical multiplicity and geometrical extension, and hence of the spread-out character

22 *Cf.* Taylor, *op. cit.*, pp. 509 ff.

of phenomena and of their plurality in space. Moreover, since Plato in the *Timaeus* explicitly identifies the stuff of which things are made with pure space or extension, the solid, corporeal nature of the sensible world could also be reduced to it. Nay more, he had perhaps found a mathematical solution of the problem of evil—a problem which along with that of the nature of God was coming more and more to the fore in his mind—and could explain scientifically why the world of particular things *must* continually fail to enact the Forms perfectly. For it is in the nature of a *continuum* that numbers themselves shall be always in the making and never quite made, and shall approximate but never quite attain or keep their Forms. Thus the number two is never completely and unreservedly given over to twoness and nothing else. It is a passage, a transition, a looking backward and forward through a perspective of infinite gradations towards one and towards three. It can never be caught in the act of being wholly and merely an example of twoness. But if number, which is the most precise, the most abstract, the best, and the most ideal measure of quantity that we have, is in its very nature too changing and too fickle to cleave to any one Number-Form, and to that one only, then all quantitative existence, just by virtue of being quantitative, is doomed to imperfection. But more of the problem of evil anon.

## CHAPTER XII

## GOD AND MATTER

### I

We turn, at last, to Plato's theology. In the *Philebus,* as in the *Sophist,* "God" figures with some prominence and is spoken of as if he had a distinct being of his own quite apart from the Ideas. He is a soul, a mind, a purposive, creative agent endowed with a personality like our own and responsible for the ordering of the world after the pattern set by the Forms. The same tendency to personify the divine and to regard it as an independent metaphysical principle is to be found in the *Statesman,* and approaches its climax in the *Timàeus.* How far it is to be taken literally and as a final pronouncement is, and must remain, an open question. But it would seem to show at least that Plato is turning theological, is asking himself just what he does mean by the God whom heretofore he has left so ill-defined, and is experimenting in his own mind with the idea of a personal Deity intervening between the Ideas and the sensible world. That theology should appear tugging on the skirts of mathematics need not surprise us, since theology is, after all, an attempt to apply the mathematical method to God, and to make him intelligible and "scientific" by formulating clearly and precisely his nature and by determining exactly his relation to the rest of the universe.

In the *Laws,* the theological phase reaches its apex and apparently dominates Plato's metaphysical thinking to the exclusion of all else. Indeed, God seems to have ousted the Ideas altogether from their supremacy and to have overshadowed them so completely in Plato's mind that we have little or no mention of them. In almost Hebraic terms Plato dwells on his majesty and glory.[1] His existence as a universal

[1] *Cf.* Barker, *op. cit.,* p. 365.

Mind or Reason infusing and controlling all things is argued at length from the orderliness and rationality of Nature, and conversely the universality of his providential oversight and control is argued from his goodness and perfection.[2] From this also follows his trustworthiness, his justice, his advocacy of righteousness in men, his punishment of evil, and his incessant warfare against disorder and corruption in the world.[3] Nay more, to enforce an acceptance of these articles of belief Plato is willing to invoke the law and to go to extreme lengths, and the measures he advocates to exterminate heresy and the punishments he devises for it form one of the darkest corners in his philosophy.

But such a theology raises immediate problems. There is no relation more difficult to make intelligible and to formulate without absurdity than the relation of a good and powerful God to the imperfection of his handiwork. It raises at once the so-called problem of evil; the problem, that is, of explaining how a divinely created and governed universe can be so full of sin and suffering and go wrong in so many different ways. Than this there is no more insistent or baffling theological question. Plato had been by no means indifferent to it, but so far he had only half faced it. The more general aspects of imperfection, so far as they bothered him, he seems to have wished to refer to the inferior quality of the not-being side of the universe and let them go at that. And yet, when one came really to examine the Ideas and consider all their implications, there arose the disturbing suspicion, voiced in the *Parmenides*, that evil things had their Forms and were no less a manifestation of true being than the good. Obviously further meditation was necessary.

Again the more specific difficulty of sin and human suffering he had evaded, rather than met, by his picture of reincarnation and of the freedom from external compulsion enjoyed by the soul in picking out each successive existence. For in the same breath he had pointed out that her choice was determined for weal or woe by the nature of her former lives, as indeed it had to be if her sufferings here and now were to be explained and

[2] 899 D–905 D.

[3] 905 D–907 A.

justified as the wages of past sins. The shortcomings of these lives, to be sure, might be traced back to an original defect and weakness in the soul which caused her to fall in the first place from the presence of the Gods and the vision of the Ideas into the round of birth and rebirth. But who or what was responsible for that innate and primal flaw in her nature? God, it must seem on reflection, was by no means justified as yet.

We might expect, then, that in the general house-cleaning and tidying up of his system in the later dialogues the problem of evil would be aired. And so it is. In the *Statesman*, the *Timaeus*, and the *Laws* it appears and reappears, and a persistent effort is made to fix the responsibility for the imperfection of the sensible world. In the myth in the *Statesman*, for instance, we are told that once upon a time, in the golden age of Cronos, mankind instead of reproducing itself was continuously created by God directly from the earth as the need for new individuals arose. And God cared for men as a shepherd for his sheep. He also immediately superintended the running of the universe, which under his guidance revolved without aberration in the right direction. But in the fulness of time the divine pilot let go the helm and retired to the look-out. At that, the world, which in spite of its God-given orderly or rational structure was composed of an imperfect, intractable stuff and had a spontaneous tendency to move in a direction contrary to the good, necessarily reversed its revolution, and gradually became more and more irrational in its movements, till it was in danger of reverting to chaos. And mankind, bereft of the divine care and left like the universe to its own devices, well-nigh perished from the earth. Finally God had mercy, and taking the helm again restored the world to order. And the lesser Gods provided men with the primitive necessities and arts of life. But instead of growing out of the earth and being directly shepherded, we had henceforth to reproduce and look out for ourselves.[4]

The tale is a combination of Pythagorean imaginings and of ideas drawn from the old Greek accounts of creation, and the *Statesman* is adorned with it, it would seem, mainly to point the

[4] *Statesman*, 269 A–274 E.

political moral with which the dialogue is concerned.[5] Hence we are warned by one scholar against taking it in any way seriously.[6] But we are also told that it has a metaphysical as well as a political bearing. Some critics find it directly in line with the thought of the *Timaeus*.[7] Others see in the material principle of reverse and disorderly motion a development of the doctrine of the indeterminate in the *Philebus*, and regard the divine king and shepherd, the cause of all goodness, truth, and being, as an imaginative and personal rendering of limit or measure.[8] And still another suggests that the myth veils an attempt to explain the imperfection of man and the general tendency of the universe to balk at the rule of the good, and that it touches, like the myth of Er in the *Republic*, "upon the question of freedom and necessity both in relation to God and Nature."[9]

If we do then attribute some metaphysical significance to the myth—and it is difficult to feel that Plato's motive is entirely political—there would seem to be a definite attempt to throw the blame for evil upon an obstructive and disorderly material principle, not only metaphysically distinct from the Ideas, but "morally" opposed to them and to all they stand for. This attempt, we may note, is no more successful than that made in the *Republic* to clear God of responsibility for human suffering. It pictures him as omnipotent in the beginning and in full control of the situation, and fails to explain why he should have "let go" when everything was going so well. Indeed it cannot give any explanation that does not impugn either the divine power or the divine goodness. Either God *had* to let go, or he wanted to.

But this failure is beside our main point. In any case, granting metaphysical significance to the myth, we would seem to detect a fairly consistent progress of the concept of "not-being" in the *Sophist* through the indeterminate in the *Philebus* and the ground of non-purposive, necessary motion in the

[5] *Cf.* Taylor, *op. cit.*, pp. 395, 396.
[6] *Cf.* Taylor, *op. cit., loc. cit.*
[7] *Cf.* Adam, *Republic of Plato*, II, 295 ff.
[8] *Cf.* Natorp, *op. cit.*, pp. 335 ff.
[9] Jowett, *Plato*, Ed. 1892, Vol. IV, pp. 433, 434.

*Statesman*, towards the final appearance in the *Timaeus* of a full-fledged material principle. It is interesting, too, to note the emerging distinction between what we should roughly call teleological and mechanical motion, and to find Plato forced to recognize that there is a good deal of movement and occurrence in the universe that cannot be regarded as altogether inspired or directed by "a marvellous intelligence and wisdom." Moreover, we get a peep into a side-show of his thought and a glimpse of the growing asceticism and puritanism of his old age, so marked in the *Laws*, in his feeling that sexual reproduction is pretty much of a come-down from the method of individual creation from the earth—though it must be said that this feeling doubtless rests in part upon common-sense observation of the devil raised in human life by the presence of an instinct whose driving force and necessities of healthy satisfaction are so far in excess of the limits most compatible with ideal social organization.

II

In the *Timaeus* all the actors in the Platonic drama—the Ideas, Soul, God, the Sensible World, Being, Becoming, Not-Being, the One and the Many, the Same and the Other, Limit and the Unlimited, the Purposive and the Necessary, Soul and Body, Mind and Matter, to mention the more prominent characters—appear together upon the stage to sing individually and in already familiar duets and trios the story of the creation of the universe and of man. Incidentally, the dialogue covers the field of the physical and the biological sciences as they were known to Plato, or perhaps, we should say, in so far as they lent themselves to his scheme. Much of it seems fantastic, and how far Plato himself meant it to be taken literally is a moot point among scholars. It had, however, a great influence upon the attempted revival and reinterpretation of Platonism some centuries later, and upon the early Christian theologians, who saw in it a divinely inspired foreshadowing of the Christian revelation.

The work, though written many years later than the *Republic*, purports to be an immediate continuation of its argu-

ment and begins with a recapitulation of the theory of the state. It is then suggested that many thousand years ago the Platonic ideal commonwealth was actually a going concern in an ancient Athens all record of which had been lost save in a tradition preserved by the Egyptian priesthood. This Athens, too, so the story ran, had saved the whole Mediterranean world from the attacks of a great island empire which at that time existed in the Atlantic just outside the Straits. Then there came a period of floods and earthquakes when the Athens of yore was swallowed up by the earth, and Atlantis, for so the empire in the western seas was called, was engulfed beneath the waves.[10] A more detailed description of the wonders, both military and civil, of these ancient rivals is given in the fragment of the *Critias* that has come down to us, and from this and the passages in the *Timaeus* have sprung the familiar legend of Atlantis and the controversy over the possible existence and submergence out in the Atlantic, once upon a time, of a lost continent and civilization.

From this excursion many thousand years into the past to a golden age of man it needs only another step to take us back to the creation of the human race and of the world in which man lives. Created the universe must have been, for its nature is sensible and physical and in a continual process of growth and decay, and only that which is immaterial, changeless, and perceived by reason alone can be uncreated and eternal. But creation implies a creator. There must, then, exist an agent by which all things were made. This agent is God.

The curtain now rises upon God confronted with an unformed chaos full of disorderly movement. Being good, he desired that the universe, also, should be as good as possible, and therefore chose for it the best of all models, the whole system of Forms, a system which is in itself a perfect organization or ideal living being. The order and beauty of the world, as well as the goodness of its creator, assure us that it is the copy of no imperfect original but of what is best and eternal.[11]

The work of creation proceeds from the top down, not from the bottom up. God did not first make the body of the world

[10] *Timaeus*, 21 E–25 D. [11] 28 A–30 D.

and later infuse into it life and soul and intelligence. On the contrary he started by translating the Form of the world into the next highest terms, those of life and animated movement, and fashioned a world-soul within which he placed the material universe. This world-soul he made as follows. He took the Same and the Other, or in other words the principle of the indivisible and unchangeable Forms and the principle which "is divisible and has to do with material bodies," and compounded of them an essence. And this essence he remixed with the Same and the Other, making the "reluctant and unsociable" material element in it subservient to the formal. The resultant principle he then cut up and recompounded according to certain laws of mathematical proportion and musical harmony, and eventually formed of it two hoops of movement placed one within the other at an angle and joined top and bottom upon a common axis. The outer circular movement, which is uniform and orderly and expresses the nature of the Same, is the movement of the fixed stars. The inner hoop of motion on the contrary, which betrays the nature of the Other, is divided into seven unequal circles, the seemingly irregular but in reality harmonious orbits and motions of the wandering stars or planets.[12]

In spite of the physical metaphors used by Plato, we must remember that so far we are dealing with a strictly immaterial kind of being—a spirit of life and activity prefiguring in itself the structure of the universe and ready to put that structure into effect as soon as the means of material expression are at hand. And in this design it is animated by the Ideas, to which the element of the Same and of Limit in its composition makes it akin. At the same time this principle is not absolutely pure "spirit." Its admixture with the element of the Other and the Indeterminate gives it a sort of spiritual body as well—a capacity, that is, for fusion with a material alloy and for precipitating sense-experience from the fusion. Still, the presence of the Same and of Limit in the world-soul, will introduce law and order into sensible experience and make it also intelligible. And the universe to which she imparts life and motion will be not only physical but rational.[13]

[12] 34 C–36 D.

[13] *Cf.* 37–A–37 C.

Having thus created a kind of being spiritually tough and brawny enough to live in a physical universe and keep it in order, and at the same time brainy enough to run it intelligently and in the best possible way, God proceeded to fashion the material world itself, and to settle the world-soul in it and put her to work. With this in view he turned to the material principle which he found in a chaotic condition, full of disorderly, aimless, and unintelligible motion. Out there in the midst of the scrimmage, being winnowed and sifted and driven apart without rhyme or reason, and tending to gravitate towards positions determined, not by an intelligent purpose, but only by their own weight, he found the rudiments of the four elements, earth, water, air, and fire.[14] These he perfected—how, we shall see in a moment—and arranging them in the mathematical proportion of two means, water and air, to two extremes, earth and fire, he compounded the universe of them, compressing them in their entirety into that fairest of all forms, the sphere. The world-body thus fashioned had no need of external organs of sense, since there was nothing outside it to perceive, and, being endowed with the appropriate movement of revolution about its own centre, it would have found hands and feet superfluous. In the midst of this body, and at the same time diffused throughout it and enveloping it, he placed the world-soul. Together the soul and body of the universe are as complete an enactment as possible of the system of Forms, or Idea of the perfect living being, and may even be called a "blessed God." [15]

The physical shape and structure of the world were now conformed, so far as the nature of matter and necessity would permit, to the Ideal. Seeing that what he had made was good and pleasing in his sight, God determined to improve it still further by giving to its moving and changing aspects what quality he could of the eternity of its pattern. To this end he created time, whose everlastingness is a moving image of eternity. Thus, when we speak of the eternal in terms of time, we speak of it as that which was, and is, and shall be. But in the eternal itself there is no "was" or "shall be." It does not grow. It is never any younger, never any older. It has not become

[14] 52 E–53 C. [15] 31 B–34 B.

in any past what it is, nor will it become so in any future. It simply *is* what it is. In becoming and change, on the other hand, there is no real "*is*," since that which is in change and movement can never be stopped in its ceaseless, unbroken flight from the past to the future. When we say then of any thing or movement in the flux that it *is*, we speak inaccurately. For its so-called "being" turns out to be not a state of rest, but the trajectory of a "becoming" in which no intermission between "was" and "shall be" is ever present.[16]

But the flow of time, if it is to be appreciable, has to be measured by sensible means. As markers God created the sun and the moon and the planets, and assigned to them the seven orbits into which the hoop of the Other was divided. These orbits, and the bodies carried in them, revolving as they do with different degrees of swiftness and in different and sometimes opposite directions, account for all the complexity of the movements of the heavens. The earth itself was set at, or near, the centre of the universe. Whether Plato looked upon the earth as stationary, or as revolving upon its axis, or as "moving to and fro" somewhat like a lion pacing up and down its cage, is a disputed point.[17] In any case, the compounding of all these movements makes the passage of time visible to us, and measurable in such terms as years and seasons, months and days and nights.[18]

But even with its structure and its activity fashioned in the image of the eternal, the sensible universe could not be regarded as finished. Further possibilities of existence contained in the intelligible pattern remained unembodied—the various species of animals appropriate to the four elements. These Forms the Creator now put into effect. First he made the lesser Gods, creating them out of fire, and placed them as fixed stars in the outer heaven or circle of the Same. To them he gave two motions, one of revolution upon their axes, expressive of their divine power ever "to think consistently the same thoughts about the same things," the other a movement of undeviating

[16] 37 C–38 B.

[17] On this point *cf.* Archer-Hind, *Timaeus of Plato,* p. 132, note 9; Taylor, *op. cit.,* pp. 448 ff.; Burnet, *op. cit.,* pp. 347 ff.

[18] 38 B–39 D.

revolution about the centre of the universe, undisturbed by the irregularities of planetary motion. The Gods of popular belief, Plato adds, perhaps not altogether without malice, may be best regarded as generated in the way people believe them to have been.[19]

Then the Creator entrusted to the lesser Gods the creation of the bodies of the animals which dwell in air and sea and on the earth. This he did to ensure and mark their inferiority to the race of Gods. Their soul, however, he mixed with his own hands, out of the remnants of the world-soul, but considerably diluted. And he distributed it among the stars, one soul to a star, pointing out that all souls must of necessity descend into human bodies for at least one incarnation, but that thereafter they would rise or fall according to the manner of their earthly lives, returning to their stars or passing into women, or later into animals, as the case might be. Meantime the lesser Gods, obedient to the Creator's behest, took portions of the four elements from the world, and welded them together to form the bodies and bodily faculties of the lower animals and man.[20]

There follows a long anatomical and physiological discussion of the human body and of the disturbances to which it is subject. Into this we have not the time to go in detail, but we may jot down a few of its most important points. As a dwelling place for the immortal part of the soul the Gods first created the head, whose roundness imitates the spherical shape of the universe, and renders it also a suitable receptacle for the circles of the Same and the Other, or of the rational and the sensible, in which thought moves. And in this head they placed sense organs. But, now, the soul, when incarnate, requires more than an instrument of thought and sensation. She needs a complete animal organism with all sorts of animal functions to keep it alive. Therefore the body with all its parts was appended to the head, and to the immortal soul a mortal soul was added for the purpose of animating everything below the neck. This mortal soul is the seat of the passions and of pleasure and pain and desire. The Gods, however, divided it into two—a spirited, contentious portion often actuated by desire but amenable to rea-

[19] 39 E–40 E. [20] 41 A–43 A. *Cf.* 69 B.

son, which they placed in the thorax, and a portion sensitive to all the bodily desires, which they set in the abdomen, as far away from reason as possible, and shut off from the rest of the body by the diaphragm. The heart is the seat of the spirited part of the soul and is the channel through which reason controls the body. And the liver reflects on its polished surface the suggestions, gentle or threatening, of reason to our animal passions. The bowels are of the length they are in order that man may have time to think.[21]

This outline, in which the threefold soul of the *Republic* reappears now domiciled in a three-decker body, is filled out and supplemented by speculations regarding the composition of marrow, flesh, bone, hair, and nails, the functioning of the sense organs, the nature of reproduction, the mechanism of respiration and of the movement of air and fire within the organism, and the causes and kinds of disease.[22] And finally we are told that vegetable life was created and endowed with a vital principle akin to the lowest part of the soul, in order that the human body might be properly nourished.[23]

But the tale of creation is even now not complete. We have contemplated the system of Forms whose organization serves as an ideal living being or universe after which the sensible order is patterned. And we have watched the process by which the phenomenal world is made in the image of the perfect and the eternal, noting that all soul is compounded of the principles of the Same and the Other, that is, of reason and of sense, and all body of the four elements, fire, air, water, and earth. We have seen, too, how the blind and purposeless motions which originally agitated the material elements were made subservient to the perfect design, and were turned into orderly and purposive physical and astronomical movement and organic activity. Two levels of existence—those of Being and Becoming—have been explored and mapped.

There remains, however, a third level—a dark and misty region into whose physical aspects we have as yet only penetrated a few steps. In the *Republic* we saw already that the world of Becoming—the phenomenal universe—was compounded of two

[21] 44 D, 47 E, 69 B, 73 B. [22] 61 C–92 B. [23] 73 A.

principles, Being, or the system of Forms, and something that Plato was then content to call vaguely Not-Being and to let it go at that. It was this third something that accounted apparently for everything in the sensible object except its Form—for its particular existence, its sensible and corporeal nature, and its change and movement. And yet the paradox remained that if this third something had to be called not-being—as it had to be if the Forms were the only things possessed of real existence—then it must be non-existent and nothing. In other words, nothing accounted for the material and sensible aspects of the phenomenal world. They were unreal, were false appearances. In the *Sophist* we found Plato grappling with this paradox. "Not," he had concluded, was a sign, not of absolute non-existence, but merely of a kind of existence different from that immediately predicated. Hence not-being did not mean nothing, but simple being that is *other than* that of the Ideas. In this way, by extending the realm of being so as to include motion, variety, individuality, and the like, he came to the rescue of the sensible world, which in the *Republic* showed alarming symptoms of expiring into Eleatic "false opinion" and illusion, and restored it to vigor and reality.

The case, however, was still perplexing. What were the ingredients of this medicine which had brought back life and flesh, color and animation, to the wan and fading cheeks of the sensible world? What was the nature of this principle that underlay *being other than* the Ideas? To call it simply "The Other" or "Difference" did not explain but merely restated the existence of such being. It smacked of "*Le Medicin malgré lui*" and of saying that the reason opium put you to sleep was because it had a soporific power. The discovery of God and the soul in the prescription might, to be sure, account for its invigorating properties. They were potent tonics capable of imparting movement and life, function and organization, to a sensible universe. But they had no food value. They could not provide stuff for the organization to assimilate and organize, or for life and movement to animate. They could not make the universe put on flesh. There was more, then, than God and soul to *being other than* the Ideas. There was an "otherness"

nutritive rather than tonic, a fleshly kind of being that explained the solid, extended, and in general the physical and corporeal, aspects of the world. This residual principle of difference from Form was indispensable. Without it God and the soul would have had nothing to mould and to breathe life and structure into. It was, then, as necessary a factor in the existence of a phenomenal order as they were. Once more, what was it? How was it to be described and defined?

In the *Philebus* we saw Plato dwelling upon "otherness" as that which permits differences and fluctuations of degree and relation, like more or less, higher and lower, swifter and slower, and renaming it the "indeterminate" or "unlimited." Here, we had not only a tentative formula expressing the nature of change, motion, and variety in the sensible world, but one that also described the unconfined and versatile power of reason to discover all sorts of relations between the Forms and to pass more or less directly, and with more or less celerity, from one to the other by various routes laid out in a kind of "intelligible space." And in discussing the Platonic theory of numbers we found this principle mathematically formulated as the indeterminate dyad, or twiceness, which is the permissive condition of all the arithmetical processes of deriving multiplicity from unity and unity from multiplicity. And in further defining it as the-great-and-the-small he was working towards a definition that seemed to merge geometry and arithmetic in a concept prophetic of the modern theory of the *continuum*. But we have had to wait for the *Timaeus* to find "otherness" transferred from logic and mathematics to physics and made the basis of a theory of matter.

To follow this transition we must go back in the dialogue to the point where Plato tells us that God made the body of the world out of fire, air, water, and earth, which he found existing in rudimentary form and driven aimlessly about in a state of primitive chaos. At this point Plato checks himself sharply. These, he tells himself and us, cannot after all be ultimate matter. For even in their rudimentary state they show, however faintly, traces of the Forms of the four elements. Moreover, they are continually changing into one another, or, in other

words, changing their Forms. There must, then, be something in them *other than* Form, "a similar principle circulating in each and all of them" which is no more *this* Form than it is *that*, but is merely thus and thus. What, then, is this something *other than* Form which is equally complaisant to all Forms and no Form, and both takes on one shape after another and appears in a number of shapes at the same time? [24]

In answering this question we may perhaps reason as follows without being unfaithful to Plato's thought. The "materialization" of the Forms in a physical universe does not in any way add to or alter the system of Forms as such. With or without a sensible world the Forms are what they are. Hence the "otherness" of a physical order from the world of Ideas cannot lie in its possession of any new Form of being. It must come rather from a non-formal dimension of existence, projection into which somehow "extends" and gives "body" to unextended and incorporeal essences. For example, if we put a duplicate photograph into a stereoscope, we do not change in any way the forms and figures printed upon it. We make the two photographs look as if they were one, to be sure, but beyond that we do no more than give a new dimension, *depth*, to something that exists merely in the flat, and make a plane surface, every point of which is equally close to the eye, appear as a group of solids some nearer, some farther away. In like manner, when the Forms are "stereoscoped" by matter and given a physical dimension, each Form, in itself an indivisible unit, looks as if it were many individual instances of itself following upon or spread out beside one another. And the whole system of Forms, which in itself exists on a flatly logical "plane" of being, now appears as if its components were "placed" to the right or the left, in front or behind, and occupied more or less "room." In other words, they give an impression of being in *space*.

Place or space, then, is the non-logical dimension, projection in which makes the world of Ideas look as if it were also a physical universe. In this lies the secret, and the whole secret, of the sensible object's being "other than" its Form. Visible "red," for example, is just redness some*where*, in other words

[24] 49 A–50 A.

redness plus a *point* at which to *appear.* The tangible, individual man is merely the Form of man unfolded in or occupying a *place.* The particular courageous, or temperate, or just act is courage, or temperance, or justice occurring at some *spot.* The particular thing of beauty is beauty *here* and *now.* Again, the Ideas, when projected in space, are different from and yet the same as the Ideas in themselves, just as the photograph, when given stereoscopic projection, is different from and yet the same as the photograph in the flat. And just as we might call the stereoscopic projection, in spite of its identity with its original, an image or shadow cast by the original and in a sense a copy of it in a new dimension, so we might call the presentation of the Ideas as a physical universe an image, or shadow, or copy cast by the Ideas upon a "place." It is space, then, that makes the Ideas appear as images of themselves and that presents them as physical objects. And finally, if we take away from the sensible world redness, and human nature, and courage, temperance, justice, and beauty, and all the other qualities, types, laws, and values that it displays, there still will remain an empty receptacle of some sort that once did contain them. The "place" they occupied may be vacant, but it is still there. Since, then, the physical universe is nothing but the world of Forms plus this dimension of "place" which makes them look as if they took up "room" and had spatial relations, Plato concludes that this is the sum and substance of the material principle.[25]

This space we are told is the "receptacle, and in a manner the nurse, of all generation." It is uncreated, changeless, and eternal, the mother of all things, within whose womb the Ideas father the sensible world. "The natural recipient of all impressions," it "is stirred and informed by them, and appears different from time to time by reason of them." But in itself it is "formless and free from the impress of any of the shapes which it is hereafter to receive from without." For if it had a Form and positive nature, it would resist the impression of

[25] 48 E–51 B; 52 B–C. *Cf.* Burnet, *op. cit.,* p. 344; Taylor, *op. cit.,* p. 456; Robin, *La Place de la Physique dans la Philosophie de Platon,* p. 29; Zeller, *op. cit.,* p. 305.

Forms unlike its own. We can only speak of it, then, as absolute emptiness, blankness, formlessness.[26]

Such a principle naturally baffles thought and description. It can be neither perceived nor conceived, since it is what is left after everything perceivable and conceivable in an object has been taken away. It must be devoid, not only of sensible qualities, but even, paradoxically enough, of all thinkable spatial characteristics. For even geometrical structure—the different points and places and figures, however abstract, that pure mathematics posits in so-called empty space—are really not space itself but a spatial content, a shaping of space, an application to it of concepts, a giving to it of Form. That they are there means that the Ideas have already appeared in space and made it conceivable.

How, then, can experience and thought ever reach this principle and rationalize it? They cannot, Plato replies. And yet, if we remove from space all the perceptible qualities and conceivable Forms without which it cannot be presented to the mind, the mind, as Plato goes on to point out, will still be haunted by a dreamlike sense of its presence.[27] The feeling will persist that there is more to the universe than the Forms we have abstracted, an "other" responsible for their appearance as images, and that this "difference" of the image from the Idea, which lies in the possession of place and dimensions, is still *there*. Think away the Ideas which God and the soul are "filming" upon the mysterious screen of pure space, and, although the screen with its dimensions vanishes, too, and can no longer be located, the eyes of the mind will remain strained towards and converged upon a "place" where the Ideas were displayed as images. They still retain a sense of depth and perspective and of an "out there" into which the Forms have been projected. For an image, since it is not Form in itself, but the projection or shadow of Form, "must be inferred to be in another (*i.e.*, in space) or it could not be at all."[28] Indeed, if the mind saw "flat" so to speak, when the sensible object was resolved into Forms, and lost this sense of "place" outside them,

[26] 49 A–52 A.

[27] 52 B.

[28] 52 C. *Cf.* Archer-Hind, *op. cit.*, p. 185, note 10.

then the universe would cease to be sensible in proportion as it became intelligible, and understanding the physical world, which is a process of reducing it to types and laws, would be a process of actually destroying its physical status. But this as a matter of fact is not the case. The universe is none the less material and spatial when it becomes transparent to thought and is seen as a system of Forms. The truth about things is, to be sure, no longer distorted by ignorance and false opinion so as to appear other than it is; but it is, for all that, still a truth about *things*, and it appears to the mind in a dimension other than that in which its truthfulness exists. Matter and space, then, may be a void when separated from the Forms which fill them and give them being, but they are a void that aches.

Pure reasoning, however, cannot stomach this pure "matter" which it is forced to swallow. It cannot see how a Form can both be and not be a Form, exist both in and outside itself, and "be one and also two at the same time." [29] So thought suffers from a chronic acute indigestion in dealing with the problem of matter, and is in a perpetual state of daze and distress. The confusion and paradox of a mind haunted by this blank "whereness" to which it can attribute no form of being whatsoever, and yet whose existence it is bound by the necessities of logic to infer as an indispensable condition of a physical universe, Plato sums up by saying that we have of pure matter an "illegitimate" or "bastard" concept,[30]—an abortive formulation, as it were, of the formless. Or we might express our predicament even more vividly in the metaphor used by a Greek disciple of Plato's in pondering upon the same difficulty some five hundred years later. Conceiving pure matter, Plotinus tells us, is like seeing darkness.[31] For darkness, being the utter absence of all visibility, logically cannot make an impression on the eye, and yet somehow manages to do so.[32]

We pass next to the problem of deriving tri-dimensional

[29] 52 C. [30] 52 B.

[31] Plotinus, *Enneads*, I, 8, § 4.

[32] For a discussion of the Platonic theory of matter as "place" or space, *cf.* Burnet, *op. cit.*, pp. 343 ff.; Taylor, *op. cit.*, pp. 456 ff.; Robin, *La Place de la Physique*, pp. 27 ff.; Archer-Hinds, *op. cit.*, pp. 44 ff.

space and bodies from formless, unconceived, and unperceived "place." The most elemental discernible matter—that is, the simplest *Forms* of matter—are fire, air, water, and earth, and these are corporeal particles. But how, by the application of Form, can solidity and bulk be imparted to a blank "where," and physical objects be fashioned out of absolute emptiness? This is obviously a puzzling question, almost as baffling, indeed, to the mind as the necessity of logically inferring that which cannot be logically conceived. Plato, however, is ready with a solution. Solids, he argues, are composed of planes, and the simplest plane figure is the triangle, which needs the minimum of lines to enclose and delineate it. All solids, then, may be regarded as produced by the juxtaposition of triangles. The simplest triangles, again, into which all others may be resolved, are the right-angled isosceles and the right-angled scalene. These we may assume to be the first formulation or "lay out" of pure space.[33] And, already before God appeared upon the scene, they were apparently in the habit of piecing themselves together into solids in such wise that they exhibited faint traces of the formations that make up the elements. Furthermore, as we have seen, these vague and rudimentary bodies were already in motion, but a motion directed, not by intelligence in accordance with a plan, but by the "necessities" of their own natures.[34]

God, however, proceeded to rebuild these bodies, and, acting in accordance with the laws of number, harmony, and proportion, he recombined their triangles in the four most beautiful combinations possible to them. In this general way he built up by special methods, too devious for us to follow here, four types of geometrical solids distinguished only by size and shape. Any single instance of such solids is too small to be seen, but, when they are collected together after their kind, their aggregates are visible as sensible fire, air, water, and earth.[35] The structures of the first three can, because of certain geometrical affinities, be integrated or disintegrated into one another's Forms. Fire, air, and water do actually turn into one another. Here, Plato apparently has in mind the phenomena of water evaporating through mist into air, and of air

[33] 53 C–54 C. [34] 52 D–53 B. [35] 53 C–56 C.

shimmering away in heat waves into fire. But earth, whose particles are composed of immobile cubes incapable of division into the kind of triangles found in the other elements, cannot "become" the others, but preserves always its own nature.[36] The various species of fire and air and the different kinds of liquid and solid existence are to be explained by the different sizes of the typical triangles and geometrical figures formed of them.[37] In short, all qualitative change can be explained in terms of movement in space.[38]

Finally, God harmonized and ordered the motions of these particles.[39] By the "necessity" of their natures the molecules of the different elements tend to be shaken away from one another and to flock together according to their feather with a momentum proportionate to their bulk. Our notions of up and down, rising and falling, light and heavy, are drawn from and are relative to these movements. There is no absolute up and down in space.[40] The innate attraction of particles of the same element for one another is counteracted by the circular movement of the heavens, which compresses the elements into one another and fills the chinks between the larger particles of the grosser substances with particles of the finer. This ordering of the "necessary" movements of the elements by the perfect movement of the heavens keeps all things in a state of perpetual change and motion according to a definite pattern and law.[41]

The reduction of matter to sheer space and of all qualitative change to change of position pure and simple has been hailed by modern critics as a feat comparable to Descartes' universal application of mathematical concepts to the physical sciences.[42] Not only were all Forms expressible in arithmetical formulae, but the whole process of becoming which underlies the sensible

36 54 C–D; 56 D–57 B.
37 57 D; 58 C–61 B.
38 57 C.
39 53 B.
40 57 D–58 A; 63 A–E.
41 58 A–C; 62 C–63 E.
42 *Cf.* Taylor, *op. cit.*, pp. 454 ff.; Robin, *op. cit.*, pp. 60 ff.; Natorp, *op. cit.*, pp. 357–358.

world could now be interpreted in terms of mere shifting of place. And again, that which shifted could be resolved into a variety of arrangements of one and the same fundamental geometrical figure. Thus, with the final "geometrizing" of its physical connotations, that "name of many names"—not-being, the other, the indeterminate, the dyad, the-great-and-the-small —was finally brought, like being, under the reign of mathematical law. Indeed nothing remained beyond the reach of mathematics except the final irreducible surd, the inexplicable fact that there is a sensible as well as an intelligible dimension to the universe, which forces a double life upon the Ideas through no fault of their own. But this brute fact is a cosmic scandal which comes sooner or later to the ears of every philosophy, and which none has ever been able quite to hush up. Sensible data are given, are simply *there*, and their presence can never be rationalized.[43] Plato, we may feel, has come as near as any other philosopher to finding a value for x, and we need not begrudge him the feeling, expressed at the close of the *Timaeus*, that from his hands the physical universe has emerged a "sensible God who is the image of the intellectual, the greatest, best, fairest, most perfect—the one only-begotten heaven." [44]

At the same time, the dialogue presents many inconsistencies and difficulties. It raises, of course, very acutely the question of the place of God in the Platonic system. Again, in describing the relation of the sensible world to the Forms, it reverts to the language and apparently to the theory of "participation" in its crudest form of "imitating" or "copying"—a way of expressing the relation of the Form to the sensible object that Plato appears to have repudiated, as we have seen, in the *Parmenides*. And the division of the human soul into a mortal and an immortal part, and the doctrine that even the immortal part is created, not to speak of the created character of the world-soul itself, are at variance with the teaching of the *Phaedrus* that each individual soul is uncreated, eternal, and essentially one and indivisible. Finally, the statement that God finds primeval chaos already in a spontaneous disordered

[43] *Cf.* Taylor, *op. cit.*, p. 455. [44] 92 C.

and random motion of its own contradicts the view explicitly set forth in the *Phaedrus* that the soul is the self-moving cause of *all* movement whatsoever.

This last statement, moreover, is retracted, if not directly, at least by implication, in the *Laws*, where Plato returns to the teaching of the *Phaedrus*. In Book X, after analyzing various kinds of movements and reducing them all to two types, self-moving and that which moves an other than itself, he finds their least common denominator in soul, whose spontaneous psychic activities, he tells us, are the causes of all physical motion throughout the universe.[45] In that case, soul must be responsible for the evil in the world, and this conclusion he accepts without demur.[46] There are, he goes on, not one soul, but at least two souls, one of which is "the author of good, the other of evil." [47] The good soul directs all the orderly movements of the mind and of the physical universe. The evil soul, or souls, are responsible for disorder in Nature and for folly and senselessness in the human being.[48]

But however acceptable a *scientific* explanation this might be of the failure of the universe to move wholly in accordance with the divine plan, it involved Plato in immediate difficulties elsewhere. For where did the evil soul or souls come from? What place had they in a world created and governed by an all-wise and all-good God? Plato had got out of the frying pan only to get into the fire. In solving the problem of motion he had raised the problem of evil. To this we now return for a moment.

In the *Statesman* Plato had laid imperfection to the disorderly nature of matter which makes the universe forget little by little the precepts of its Creator.[49] And from this point of view the evil propensities in soul might be regarded as a kind of secondary and degraded state ascribable to the material admixture in her composition of the principle of the "Other." Thus the origin of imperfection might still, in spite of the intervention of soul, be referred to the corrupting influence of not-

[45] 896 A–D; 897 A.
[46] 896 D.
[47] 896 E.
[48] 897 A; 898 A–B.
[49] *Statesman*, 373 A–B.

being,[50] and particularly to its physical phase. That Plato considered matter the source of evil is expressly stated by Aristotle.[51] But whether this is his last word on the subject has been questioned. The ancients interpreted the passages in the *Laws* to mean that there are two world-souls, one as innately evil as the other is innately good, and that the imperfection of man and of the world proceeds from the activities of a power to all intents and purposes diabolic in itself. And some modern commentators have accepted this interpretation as true at least to the view held by Plato in his old age.[52] Others, while rejecting it, do so only on the ground that we have no warrant for restricting the number of evil souls to one, and are emphatic in declining to regard the ascription of evil to matter as the final Platonic doctrine.[53]

There is much to be said for this position. Certainly the reduction of the indeterminate to a mathematical concept and the identification of its physical aspect with pure space had unfitted it for the rôle of villain in the cosmic drama, and made the lines assigned to it in the *Statesman* sound quite out of place. In the *Timaeus* Plato was already insisting upon the essential formlessness of matter and its lack of a positive character of any sort, and this precisely that it might not "intrude its own shape" upon the Forms with which it was impressed and thus "take the impression badly."[54] It proved to be perfectly non-resistant and transparent, without speck or flaw to blur or distort the Forms that appeared in and through it. Moreover, the doctrine of an inherent disorderly motion in matter stood, when it was carried over from the *Statesman* to the *Timaeus*, in obvious contradiction, not only to the teaching that soul is the source of all motion, but also to the doctrine of matter as pure "place." In itself "place" was not in motion of any kind. And it lent itself equally to the reception of movements of all sorts. But all these movements had to be introduced into it

[50] *Cf.* Robin, *La Pensée Grecque,* pp. 274–275, who accepts intractable matter as Plato's ultimate explanation of evil.

[51] *Metaphysics,* I, 6. 988*a* 10–16; *Physics,* I, 9. 192*a* 14–15.

[52] *Cf.* Zeller, *op. cit.*

[53] *Cf.* Burnet, *op. cit.,* pp. 333–334; Taylor, *op. cit.,* pp. 491–492.

[54] *Timaeus,* 50 D–E.

from the outside and to originate in external causes to which alone they owed their being and their direction.

That matter, then, had a spontaneous "necessary" or "reverse" motion of its own, opposed to purposive activity and resistant to the divine plan, was a difficult theory to hold. No "necessity" could be found in its nature for things going badly when God let go the helm and left them to themselves.[55] Necessity, the other, the indeterminate, not-being, turned out on examination to be morally innocuous principles. They meant that the fact of a sensible world resists reason merely in the sense that it is a fact the Ideas cannot account for and logic cannot explain. But there was nothing in them to show why the Forms, when projected in a sensible dimension, should behave unreasonably and look *worse* than they really were. All in all, when one came to investigate the nature of matter one had to grant it a complete alibi, so far as responsibility for evil-doing in the universe was concerned.

Thus Plato might seem by his own logic to have cleared matter of any suspicions that he entertained about it in his earlier thinking, and to have forced himself to search for his villain elsewhere. And, as in the dénouement of most detective stories, everything suddenly pointed, now that the false scent had been abandoned, to one of the most respectable and godly characters in the plot. The real criminal, at whose door all the wrong going and doing of the universe must be laid, could be none less than soul herself. Evil was essentially disorderly activity, physical and mental. And soul was self-confessedly the cause of all motion whatsoever. Therefore soul must be ultimately responsible for disorderly as well as orderly movement both in herself and in the world. She was not corrupted and egged on by matter. On the contrary it was she that corrupted and upset matter by her evil communications. To deny this, would have involved denying one of the cardinal points in the Platonic system.

Still, to accept it without qualification would have been equally destructive. For in that case, the best that could be said of soul was that she was an absolutely unmoral principle indifferent in her works to the distinction between good and

[55] *Cf. Statesman,* 269 C–D, 272 E–273 A.

evil and to the success of the divine plan. And if she were created by God, God after all was alone responsible for what she was, now that the principle of the "Other" in her composition had lost any possible immoral significance. But if God were responsible, then he, too, became unmoral, the author of evil as well as good. And that spelled good-bye to the last vestiges of teleology, design, divine purpose, and a moral government of the world. One might just as well, and even rather better, have had the hated mechanism of Democritus as the agent that enacted and embodied the Forms.

Plato, it will be observed, was thus confronted at last fairly and squarely with the dilemma that had troubled him in the *Parmenides*. The conclusions to which he was driven as a scientist were once more at loggerheads with the views that as a religious and moral zealot and reformer he wished to hold. In the earlier dialogue he had been troubled by the thought, to which science and dialectic inevitably led, that there must be Forms of evil things as well as good, and that therefore the explanation of evil must be sought in the world of Ideas. Now we may imagine his science, with a logic that could no longer be evaded, exposing the nefarious doings of a principle scarcely less divine and exalted, and turning the world-soul into a kind of Dr. Jekyll and Mr. Hyde.

Finding himself between the two fires of science and religion, and deprived by his own reasoning of any retreat in the direction of intractable matter, he could escape from his predicament by one path only. There was nothing for it but to cut Dr. Jekyll and Mr. Hyde in two. They must be regarded not as two aspects of one and the same soul, but as fundamentally different kinds of soul, innately antagonistic to each other. There must be one set of souls, headed, let us say, by God, whose natures inclined them to sow law and order and goodness in the "receptacle of all generation," another set whose natures impelled them to heedlessness of the ideal scheme and to disorderly and obstructive conduct.[56] Though Plato apparently still clung in the *Laws* to the view expressed in the *Timaeus* that *human* souls are created, albeit indestructible, the divine souls are

[56] *Laws*, X, 906 A–B.

declared to be without beginning as well as without end,[57] and the implication is that the sources of evil in the world are coeternal with the sources of good. At any rate, only on such a supposition could he have cleared God from responsibility for evil. If we may assume this—and certainly it is the impression one gathers from the *Laws*—the reconciliation of Plato's science and his theology might have been complete in his own eyes at least. Soul would still have been the cause of all motion and activity and life, as his science insisted, but God, as the moralist and religious devotee desired and demanded, could still be worshipped and glorified as the author of only what is good.

Such a solution, moreover, would have been in line with the tendency of his old age to think in theological terms and with his evident inclination to dramatize and magnify to cosmic proportions the conflict between virtue and vice.[58] Possibly, too, a growing acquaintance with Persian dualism and with the Zoroastrian vision of the universe as an everlasting struggle between the powers of light and darkness may have contributed to his thought.[59] But in any case, such favorite weapons of the theologian as teleology, the argument from design, and the evidence for a moral government of the world are notably double-edged and keen in malicious insinuations. For, taken at its *moral* face-value the world is double-faced, and seems as often to frown as to smile upon our well-being. Hence, to find a purpose in it is, if we are unprejudiced and all-inclusive in our findings, to discover cross-purpose. We can scarcely argue that the favorable and helpful aspects of the universe are evidence of divine design and guidance, unless we are willing to admit that the obstructive and harmful aspects look like the handiwork of a malevolent intelligence. And if the evidence for design is trustworthy in the one case, it must be trustworthy in the other. The shoe, to be sure, may pinch sentiment and reason when it is on the other foot, and may provoke outcries against superstition from many a good theist who thinks it as unreasonable to believe in a devil as it is reasonable to believe in God. But the logic would seem to be inexorable. If there

[57] X, 904 A.
[58] X, 904 A–906 E.
[59] Jaeger, *Aristoteles*, p. 134.

is no ground for inferring an evil purpose behind the evil in the world, there is no ground for inferring a good purpose behind the good. And conversely, if there is reason for supposing that what is good from our point of view is deliberately *planned* for the best, there is equal reason for supposing that what is bad from our point of view is deliberately *planned* for the worst.

The argument from design, then, taken in itself turns out to be as forceful an argument for diabolism as for theism, and cannot be used exclusively in support of either. Teleology, if left to itself and honestly conducted, plays no favorites. It matches each throw in favor of a personal deity with one in favor of a personal devil. To load the dice for God and against the devil we must go outside the argument from design altogether and find other considerations—but considerations, it will be discovered, that forbid us to look upon everything in the universe as the work of mind and purpose, and therefore as intelligently designed. Moreover, we might even then reverse the argument, and maintain that the good in the world springs from the mechanical resistance offered by matter to the purpose of an evil designer. So far, however, as we seek like Plato —and like so many modern theologians—to apply teleology universally and to regard the entire structure of the universe as evidence of intelligent contrivance, we cannot logically escape the conclusion that evil as well as good contrivers have had a finger in the pie. In marching straight to this conclusion Plato was much more honest and logical than the mass of teleologists and theists to-day, who spend endless hours trying to "justify" God by showing that the worst is like the best and that what seems evil is really good. His theory of an evil world-soul or souls is not a strange vagary but part and parcel of his theism. Indeed, as one critic has remarked,[60] it is so consistent with his teleology and with his theory of mind as the cause of all cosmic activity that we should accept it without demur, were it not for his earlier flirtations with free-will and intractable matter. Doubtless, too, the reluctance of some commentators to regard the doctrine as really Platonic and their efforts to explain it away reflect in no small degree the unwillingness of modern

[60] *Cf.* Zeller, *op. cit.*, p. 546, note 118.

philosophers in general to take the devil seriously, and their consequent dismay at finding him on lips whose other words of teleological import they hail as sweetly reasonable.

What we have been saying presupposes, of course, that Plato really did believe all along, or did really come in the end to believe, literally, steadily, and whole-heartedly in a personal Creator. For, obviously, we do not have to descend to personalities in dealing with the evil in the universe unless we have already become involved in them when dealing with the good.

The evidence of the *Philebus*, the *Sophist*, the *Timaeus*, and the *Statesman* is, if taken at its face value, certainly in favor of attributing to him such a belief. To this we must now add the testimony of the *Laws*. In this last dialogue of his old age Plato argues with great vehemence in support of theism. The existence of the Gods is proved, in his opinion, both by the regularity and order of the movements of the heavenly bodies and by the universality of the belief in divine beings.[61] Furthermore, everything points to the fact that the Gods are moral beings, absolutely good, acquainted with the needs of the universe and of mankind, and actively interested to the smallest detail in defeating disorder and evil and ensuring the triumph of justice and right, both in the world at large and in human affairs.[62] Nor are their justice and their righteousness of a kind to be turned from their paths by the prayers and propitiatory sacrifices, the incantations and the flatteries, of frightened sinners seeking to avert divine retribution.

This assertion of the existence of moral and personal deities exercising a providential control of man and the world is reinforced by a vigorous attack upon the materialists and the mechanicalists, who maintain that the physical elements "all exist by nature and by chance, and none of them by art," and that in a purely mechanical way, with no design or purpose whatsoever, the heavenly bodies, the earth, and all that dwell therein have been built up out of them. In fact, Plato avers, these philosophers maintain that human institutions, and even morality itself, are purely accidental and relative things, and that the very Gods are only fictions of the human imagination.[63]

[61] *Laws*, X, 886–888 A. [62] 899 D–905 C. [63] 889 A–890 B.

To these opinions Plato replies with his doctrine, with which we are already familiar, that all motion and life must derive from a living and intelligent principle which is self-caused and self-moving. This principle is soul. The orderliness of the world presupposes a rational and good soul as the governor of all things; though, as we have already seen, the existence of disorder and evil necessitates the admission that a portion of this soul-principle is inferior and wayward by nature.[64] The "best soul," [65] which is responsible for the order and rationality of nature, would seem to be God. Elsewhere Plato speaks of "the ruler of the universe" who "has ordered all things with a view to the excellence and preservation of the whole"; [66] the "king" who "has contrived so to place each of the parts that their position might in the easiest and best manner procure the victory of good and the defeat of evil." [67] Besides the supreme director of all things, there are souls of the heavenly bodies, and they, too, are divine; so that "all things are full of Gods." [68]

Securely protected, however, as Plato's claim to be considered a good, old-fashioned theist might seem, it has afforded no shelter against the searching winds of criticism, and we find ourselves once more assailed with the old doubts and cut adrift upon a sea of troubles, with no hope of haven or sure anchorage. For the question at once arises whether the evidence can be taken at its face-value. How much is "myth," how much figurative, how much has to be discounted? Did Plato really regard God, always or in the end, as a being separate from the Ideas and the Good? Is this description of him as a "best soul" and a kind of "king" of souls to be taken as accurate, as some critics maintain? [69] Or was the divine intellect the place where the Forms existed, and were the Ideas its thoughts? [70] In that case, is God to be identified with the Idea of the Good, and is the Idea of the Good to be conceived as a quasi-personal Su-

[64] 891 C–898 B.
[65] 898 C.
[66] 903 B.
[67] 904 A–C.
[68] 898 E–899 B.
[69] Burnet, *op. cit.*, pp. 355 ff.; Taylor, *op. cit.*, pp. 492 ff.
[70] Lutoslawski, *Origin and Growth of Plato's Logic*, p. 477.

preme Mind?[71] Or did the divine pilot of the *Statesman*, the designing Creator of the *Timaeus*, and the God of the *Laws* belong to Plato's poetry and mythology rather than to his metaphysics? Were they personifications, not to be taken literally, of the dynamic aspect of the whole system of Forms, or Idea of the Good, picturesque expressions of the fact that it is the world of Ideas that gives being and structure to the sensible universe?[72] And if so, did this personification start from the Idea of the Good and superadd a personal deity,[73] or does it represent the more naïve tendency of thought still clinging to the more abstract and philosophical concept developed out of it?[74] Or finally, did Plato to the end waver between two moods, one scientific, the other religious, conceiving the source of all being, determination, and order in things now as a personal God, now as the system of Forms, taken in its wholeness, constituting an impersonal Idea of the Good?[75] Such are some of the questions raised by modern scholars. Any one of them we may answer as we choose, and have good authority for our choice. And whatever answer we do give will be immediately rejected by an imposing array of critics. We shall do well then to regard this chorus of divergent opinion as the grand *finale* of our speculation, and in the midst of it to ring down the curtain on the unsolved problem of what Plato really meant by God.

But in so doing, we are gathering up our wraps and leaving the Platonic theatre still in doubt as to the real explanation of evil. Was the evil world-soul (or souls) also a purely mythological and picturesque characterization? Was evil purely negative and merely a defect in the sensible presentation of the Ideas?[76] If so, did matter, despite its neutralization in the *Timaeus*, still retain for Plato, however inconsistently, an intractability and an obstructive element of necessity never wholly amenable to purpose?[77] Or was he haunted to the end

[71] *Cf.* Zeller, *op. cit.*, pp. 279 ff.; Archer-Hind, *op. cit.*, pp. 30 ff., 37 ff.
[72] Natorp, *op. cit.*, pp. 339 ff.; Raeder, *op. cit.*, p. 381.
[73] Raeder, *op. cit., loc. cit.*
[74] Natorp, *op. cit.*, p. 315.
[75] Stewart, *op. cit.*, pp. 101–102.
[76] Archer-Hind, *op. cit.*, p. 33.
[77] *Cf.* Zeller, *op. cit.*, pp. 337–340.

by the thought, hinted at in the *Parmenides*, that there must be Forms of evil? Or did he never get over the feeling expressed in the *Phaedrus* that the soul was for all eternity and inexplicably of a dual nature, inclined of herself to fall? Or did he always feel, as he seems to do in the *Republic* and again at one point in the *Timaeus*, that the responsibility for her fall could be laid to the free choice of the soul, even though she were created by a God who was the author of the good only? [78] Was there a development in his theory in which solutions previously held were later discarded? Or did he wobble between these various solutions, unable to make a choice between them, and holding to none of them more than tentatively? Here again we had better turn out the lights and leave to its obscurity an unsolved problem.

The reversion in the *Timaeus* to the metaphor of participation so severely criticized in the *Parmenides* has also given rise to perplexity and discussion, particularly on the part of the advocates of the "one-storey" interpretation of the theory of Ideas. Their tendency is to dismiss as mythological and figurative the accent placed upon the existence of two distinct enacted orders, and to maintain that it does not invalidate the essential unity of the ideal and the sensible worlds and the unenacted character of the Form when taken apart from the particular object. But, on the other hand, there are critics who maintain that the *Timaeus* reaffirms the "two-storey" theory of a separate, self-enacted world of Forms and frees it from the objections urged against it in the *Parmenides*. The difficulties inherent in the doctrine of "participation" are relieved, we are told, by the concept of matter as the receptacle of becoming. Without matter, participation would have reduced the sensible world to a kind of dangling appendage to the Ideas, wholly dependent on them for its existence. But matter gave the sensible world feet of its own to stand and move on. It was sufficient reason for something existing besides the Forms, and it explained the particular and individual character of objects. Thus the object could now "participate in" or "be like" its Idea without having all its being reduced to Form

[78] *Timaeus*, 42 B–D; *cf. Republic*, X, 617 D–E.

pure and simple. And conversely the Ideas could be present in their objects, and yet remain apart from them, now that there really existed a principle or medium different from themselves for them to appear in.[79] In other words, the realization that there is a mirror of some sort, and not mere nothingness, behind the sensible world enables us to regard that world as an image rather than an illusion, and a trustworthy image at that. Thus we are saved not only from barking at the reflection as if it were the being reflected, but also from feeling that we are most unaccountably seeing double and taking what is really one being as if it were two.

From this view, however, there might be considerable dissent. It might be disputed on the ground that under the aspect of the indeterminate Plato extended the material principle into the world of Forms itself, attributing to them, no less than to the sensible objects, "otherness," plurality, and individuality. In that case, obviously the matter in the particular objects would not brand them as things necessarily enacted in a different medium from the Forms and on a lower level. Nor would it be evidence that the Forms must have enacted existence outside the sensible universe.[80] Once more, perhaps, we had better let the *Timaeus* write *finis*, though not conclusion, so far as we are concerned, to a difference of opinion no end of which is in sight.

[79] *Cf.* Robin, *La Place de la Physique*, etc., pp. 25 ff.
[80] Raeder, *op. cit.*, pp. 392 ff.

## CHAPTER XIII

# PLATO'S LATER POLITICAL THEORY

### I

THERE remain a few words to be said about Plato's later political theory. Generally speaking, as we have already had occasion to note, his tendency was to make concessions to the actual conditions of human nature and its environment and to concern himself with working out schemes that he thought to be really practicable. But in his heart he felt that the institutions he was now proposing were only second-best, and his faith never wavered that the system he had advocated in the *Republic* was still ideal, even though he had come to recognize that among fallible human beings it was unworkable. The general form assumed by this relinquishment of hope was the substitution of a perfect system of impersonal laws for the perfect personal element in government exemplified by the "guardians" in the *Republic* and, as we shall see in a moment, by the ideal king in the *Statesman*. Moreover, because of his increasing insight into what could, or rather could not, be expected of mankind, and doubtless also because of the disillusionments he had suffered at the hands of Dionysius II and again in the troublous times after Dionysius had been driven out by Dion, the picture that these laws were intended to frame differed somewhat from that set forth in the *Republic*.

The change, however, was not abrupt. In the *Statesman*, a dialogue composed, it has been suggested, under the direct influence of his association with Dionysius II,[1] he still clung to the idea of government by a superior person, although he had not only abandoned the "guardians" for a single king, but had even dismissed the notion of perfect philosophic kingship,

[1] *Cf.* Barker, *op. cit.*, p. 271, pp. 292 ff.; Raeder, *op. cit.*, pp. 350–351; Stewart, *op. cit.*, p. 91.

whether in the hands of one or many, to the realm of unattainable ideals. Statesmanship, to be sure, to the description of which Plato brings his method of definition, is not only knowledge, but knowledge exercised, and not only exercised, but exercised with supreme authority. The material upon which it is so expended is the human race, and the object of its knowledge is what is best for man. With such a vision and such stuff to work with, it is the queen of the applied sciences. And the statesman himself, being a worker not only in living stuff but in gregarious living stuff, and in a flock of human beings at that, is responsible for the maintenance and the management of the greatest and most important institution in the world, human society. Being conversant with the good and wholeheartedly solicitous for human welfare, as the shepherd is for the well-being of his sheep, his commands ought to be obeyed voluntarily and eagerly. His flock should find his service perfect freedom.

But alas! this picture is too good to be true. It was true, however, in bygone days in the Golden Age, when God himself was the shepherd-king and governed in person. But since the time when he "let go the helm," and things went to the bad, the picture no longer fits the facts. God, indeed, resumed the maintenance and direction of the universe, but not the management of human affairs. That he left to human beings, and since then kingship has been in fallible hands. Furthermore, kings are now faced with a problem which did not exist then. God's commands were voluntarily and joyfully obeyed by men, but the human king, reigning over fallen beings, deals with imperfect and recalcitrant subjects. He must weave strands of various and coarser texture together to form the fabric of the state.[2] Distinguishing the man best fitted for such a job is like picking the best weaver by nature out of a crowd of applicants. And this Plato goes on to do by employing again his method of definition by division.[3] The final selection, in which the true king is sorted out from the mass of those who pretend to political knowledge, is difficult to make, and the kind of magistrates that are elected by the people bear witness to the difficulty.[4]

[2] 279–283 B. [3] 287 B–290. [4] 291 A.

How, then, are we to spot the kingly man among the animals of every kind, the lions and the centaurs, the satyrs and other such "weak and shifty creatures;—protean shapes quickly changing into one another's forms and natures," that lay claim to political ability and take upon themselves the management of the state, as things now exist? The separation of the true from the spurious ruler Plato undertakes by reviewing the various forms of government actually in being. There prove to be six in number. According as it is exercised with or without the consent of the governed, the rule of the one gives us royalty and tyranny, that of the few, aristocracy and oligarchy.[5] And even democracy, in which the many rule the few and the poor the rich without respect for the wishes of the minority,[6] may on second thought be divided into two sorts, constitutional and lawless, according as its rule is or is not directed and restrained by written law. Philosophic kingship, of course, would be a seventh form if it were practicable, which it is not.[7]

Now, one and the same criticism may be brought against all these six forms. Each of them without exception rests upon false principles. In themselves the one, the few, the many, poverty, wealth, voluntary or compulsory submission, written law or its absence, are politically unsound unless they are accompanied by science and knowledge. But if science and knowledge are present, it makes little difference in theory which of the six forms government takes. Science, then, or knowledge of the art of government, is the distinguishing characteristic of the man fitted for kingship and serves to mark him out from the counterfeit claimants to political authority.[8]

Indeed, so basic, so indispensable, and so satisfactory is science as a principle of government that the truly kingly man, of whom it is the mark, would do well to govern without laws, and might justly impose his will upon his subjects without, or even against, their consent.[9] Laws at the best can fit only general cases, and their very impartiality proves to be an ob-

5 291 C–292 A.
6 292 A.
7 303 A–B.
8 292 A–E.
9 293–294 A.

stinate and ignorant tyranny which "will not allow anything to be done contrary to its appointment or any question asked—not even in sudden changes of circumstances, when something happens to be better than what they commanded for some one. But the differences of men and actions, and the sudden irregular movements of human things, do not admit of any such universal and simple rule. And no art whatsoever can lay down a rule which will last for all time." [10]

Since, however, no human ruler "can sit at every man's side all through his life, prescribing for him the exact particulars of his duty," or give him absent treatment, written laws and unwritten customs laid down "for the majority, roughly meeting the cases of individuals," must be imposed. But these are concessions to an imperfect situation. No one possessed of royal science would consent to such restrictions upon his activity if he could help it. And even as things are, the legislator should always be ready to discard and alter laws as conditions change, just as the physician finds new remedies and alters his prescriptions.[11]

Furthermore, the true king should pay no attention to the opinions of his subjects, but should use a "gentle violence for their good," and compel them, contrary to law and custom if need be, "to do what is juster and nobler and better than what they did before." The good physician compels his patients to do against their will things that are good for them, and is praised, not blamed, for so treating them. So too, the pilot is autocratic in his guidance of a ship. Autocracy, then, might well be the rule on the ship of state.[12]

Now, the kingly science, or statesmanship, is rare and the possession of a very few men at most. Hence the best form of government, which alone is justified in being autocratic, would be monarchy or, at any rate, an extremely limited aristocracy.[13] At the same time the difficulties of finding a truly wise king are so great and autocracy is so perilous that, as

[10] 294 B–C. The order has been changed and the translation slightly altered.

[11] 294 D–296 A.

[12] 296 A–297 B.

[13] 297 B–C.

things stand, the hands of the ruler must be tied to some extent.

The ordinary political methods of accomplishing this are, however, all wrong. Suppose one tried to check an incompetent or unscrupulous physician or pilot by calling together an assembly of ignorant laymen or landsmen and having them draw up a set of rules that all pilots or doctors must absolutely follow in the practice of their profession! Or suppose that we tried to correct matters by having pilots and physicians "appointed annually, either out of the rich, or out of the whole people . . . and elected by lot; and that after their selection they navigate vessels and heal the sick according to written rules" . . . and, again, after their year is up, have to give an account of their doings and defend themselves from all sorts of irresponsible accusations before a court of judges who know nothing of the subject! Or, finally, suppose our rules and regulations forbade any one "enquiring into piloting and navigation or into health and the true nature of medicine," and threatened with indictment as a distorter of truth and a corrupter of the young any one who questioned the written laws, advocated any action other than they allowed, or proposed anything new in their place! Where should we be? Such behavior would make all scientific inquiry unlawful and would be absolutely fatal to the progress and, for that matter, to the very existence, not only of medicine and navigation, but of every art. And yet this is just how all our present systems of government are behaving in the case of politics and, Plato might have added, had he lived to-day, of economics. Still, it must be admitted, it is better that even inflexible, short-sighted, and indiscriminating laws should be obeyed by all than that they should be broken "from motives of interest and favor, and without knowledge" by the kind of rulers we *elect* to office, and elect by devices like "a show of hands or . . . lot."[14]

We must, therefore, concede that law is a necessary limitation upon every type of authority short of the rule of the philosopher-king—that God among men of states,[15] as Plato, possibly influenced by Pythagorean teaching, calls it.[16] For

[14] 298–300 B. [15] 303 B. [16] *Cf.* Barker, *op. cit.*, p. 48, p. 280, note.

that matter, it is doubtful whether mankind would accept unrestricted authority in even an ideal ruler, so suspicious are they of absolute power in the hands of a single man, however wise and good he may be.[17] At all events, in the actual world it is the presence of a constitution that differentiates the better from the worse in each of the six practicable forms—royalty from tyranny, aristocracy from oligarchy where it is a question of government by the few,[18] and even in the case of democracy, a constitutional sort, as the lesser of two evils, from a kind unrestrained by written law.[19]

But the safeguards of law by no means remove the necessity for statesmanship in the ruler. Therefore, in view of the fact that political wisdom is possessed at the most by a select few and, we may add, is applied with the least friction and the least division of counsels by one man alone, a monarchy safeguarded against possible misuse by the submission of the ruler as well as the ruled to constitutional restrictions is still the best practicable form of government. Moreover, the restraining laws in this case will not originate in popular assemblies composed of laymen who are ignorant of the subject, but will be based upon long experience and the wisdom of counsellors who have graciously recommended them and persuaded the multitude to pass them.[20]

Next to constitutional monarchy in order of merit we must rank the legally regulated rule of the few, or aristocracy, and then democracy stabilized by written law. Moreover, democracy "which is the worst of all lawful governments" is "the best of lawless ones." The multiplication of offices and officeholders and the division of authority that render it the most inefficient form of constitutional government in existence also serve to make it the most innocuous, and the best and the least oppressive to live under, in a state where there are no constitutional guarantees.[21] After democracy unbridled by law comes oligarchy or the lawless rule of the few, and, last and worst, tyranny, in which the rule of a single individual is neither

17 301 C–D.
18 301 A–B.
19 303 A.
20 300 A–B.
21 303 A–B. *Cf.* Barker, *op. cit.*, pp. 290–291.

checked and disciplined by law nor inspired and directed by statesmanship, but is directed by appetite and ignorance.[22]

Plato, it will be noted, is not so bitter against democracy as he was in the *Republic*. It has gone up a peg in his estimation and is now regarded, even in its worse form, as more, instead of less, desirable than oligarchy. This may be due, it has been suggested, to the fading of his bitterness over the death of Socrates.[23] As this bitterness became less acute, his memories may well have revived of the good account, apart from that incident, that the restored democracy under Thrasybulus gave of itself at Athens, in contrast to the misrule and the terror of the reign of the Four Hundred and the Thirty Tyrants.[24]

We now turn from the statesman as monarch to the political task that will devolve upon him—from the weaver to his web and his weaving, to revert again to the Platonic simile. The strands out of which he must fabricate the state are the unruly and often antagonistic natures of individual men. It is not merely that in the manufacture of his stuff he must first test the strength of these human threads, reject altogether the bad, and subordinate the weak. Even the best and strongest goods do not always go well together and must be harmonized and blended. Virtues like courage and gentleness are at cross-purposes and pull against each other. In matters of national policy, for example, the gentle and orderly people are for peace at any price, the courageous for rushing into war. Either class left to itself would bring about the ruination of a country. Moreover, courage is apt to degenerate into violence, gentleness into sluggishness or cowardice.

It is the business of the statesman to weave these contradictory elements together into a harmonious whole. This he will do in two ways, one mental, the other physical. He will implant in the souls of men true and rational opinions about the honorable and the just and the good and their opposites, which will tame and civilize the courageous, and will rescue the peaceful and orderly from becoming soft and silly and render them temperate and wise. And he will marry the bodies of his sub-

[22] 301 C; 302 E.

[23] *Cf.* Barker, *op. cit.*, p. 291.

[24] *Cf.* Barker, *op. cit., loc. cit.*, note 2.

jects to one another in such wise that the antagonistic virtues, instead of being inbred and producing mad or imbecile offspring, will offset each other and bring into the world children in whom temperance and courage are mingled in due proportion. Thus "one smooth and even web" of a just and temperate citizenry will be woven out of opposed qualities. Needless to say, the monarch must himself possess the proper combination of these virtues. For, although the merely "temperate ruler is very careful and just and safe," he "is wanting in thoroughness and go," whereas the purely courageous ruler "falls short in justice and caution, but has the power of action in a remarkable degree, and where either of these two qualities is wanting, there cities cannot altogether prosper either in their public or private life." [25]

Once more we may note important differences from the *Republic*. Plato is silent regarding communism of property. Although he still insists on eugenic control of marriage, there is no mention of holding women and children in common. No educational curriculum is set forth by which the citizens are to be instructed in the nature of the honorable, the just, and the temperate. The tri-partite division of the soul and of the state has disappeared. Spirit and appetite have vanished as the elements of which courage and moderation are the characteristic virtues, and these qualities are left without distinct supporting faculties. Specialization of classes is replaced by blending of temperaments. Justice is no longer an all-embracing virtue, but simply one among others. And the good seems to lie in striking a balance between temperance and courage.[26] In this, and also in what Plato has to say about the viciousness both of excess and defect, we may perhaps see once again the influence of the Pythagorean doctrine of Limit and a foreshadowing of the Aristotelian definition of virtue as a mean state lying between extremes.

II

In the *Laws* we have Plato's last word on the best constitution of human society, and incidentally on many other subjects.

[25] 306–311.

[26] *Cf.* Barker, *op. cit.*, pp. 282–283.

Conceived very likely at the time he was working with Dionysius II, the dialogue was written during the last decade of his life and was interrupted by his death. According to ancient tradition it was published posthumously, without emendation and just as Plato left it, by his pupil, the astronomer, Philip of Opus.[27] It purports to be the advice given by an Athenian stranger to a Cretan who is about to found a new colony on the site of ancient Cnossus. A Spartan, too, "listens in" at the conversation, which occupies a hot summer's day walk from Cnossus to the cave and temple of Zeus not far away in the country. The conversation, however, resolves itself into an unrelieved monologue, and generally speaking, the work, in spite of splendid flashes and a tendency to improve towards the end, is distinctly inferior in style and dramatic power.

As we have already noted, the dialogue seems to mark the definite adoption of the opinion, already half expressed in the *Statesman*, that the greatest guarantee of good government by imperfect human beings lies even more in the kind of laws than in the class of officials that dominate the state.[28] It was not that Plato had ceased to believe in the philosopher-king and in giving him a free hand if he could be found. But his experiences at Syracuse may well have convinced him that it was beyond the power of education to produce such a being, and that mankind would have to content itself with "second-bests." In that case, the best practicable thing might be to draw up as perfect a code for the regulation of the state as was humanly possible, rather than to rely upon the training of superhumanly wise and able governors. At any rate, it is to the description of such a code that the climax of the *Laws* is devoted, though at the very end we find a reversion to the emphasis placed upon the necessity of the all-wise person, and new suggestions for government in which the guardians of the *Republic* reappear in changed and more sombre attire.

Plato, however, by no means scants the question of the best form of government. He has his idea of the kind of machinery most suited to the enforcement of his code. But the matter is

[27] *Cf.* Barker, *op. cit.*, p. 292. Burnet, *op. cit.*, p. 301.
[28] *Cf.* Barker, *op. cit.*, pp. 294 ff.

no longer vital. He is willing, as we shall see in a moment, to go far in yielding to the actual condition of affairs. Democracy, against which he had begun to relent in the *Statesman*, is now still more completely forgiven. Indeed he actually advocates it, in combination with constitutional monarchy, as the best obtainable, if not the most ideal system. Furthermore, so far as the monarchical element is concerned, he is no longer keen on a single king, but suggests rather a supreme council, and elected by the people at that, as the most efficient sort of executive. So, except for the final veering towards the philosopher-king, which characterizes the twelfth book, a mixture of democracy and elective aristocracy is his final political suggestion.

This conversion to the supremacy of law and the lowered stress on the importance of the particular make of political machine, as well as the more benevolent attitude towards democracy, were probably no mere grudging concession to realities from which he had at last admitted to himself he could not escape. He was an old man approaching eighty. He had lived much, seen much, suffered much. He had observed and meditated upon human nature, and from his very disillusionment he had harvested a ripe and sound knowledge of practical politics. Then, too, old age was retiring him from the world of affairs, which, even had his eyes still been focused upon it, might well appear to recede and to diminish in importance. But his eyes, as they tended to lose their focus upon the concrete and particular details of life, were also shifting elsewhere. While his mathematical and scientific interests still occupied his attention, the God who had so slowly and lately taken definite shape and place in his systematic thinking was also moving towards the centre of the stage, and theology and a theocratic moralism—one can scarcely call it ethics—had become a dominant feature in his philosophy. The important thing now was to figure out the rules and the regulations to which mankind must be subjected if it was to find favor in the divine sight. These rules were unchangeable and admitted of no discussion save perhaps by the very old and wise. They must be enforced at all costs. But with the machinery for enforcing

them Plato was no longer so concerned. It might well be a relative and a variable thing. For it, and for it almost alone among human institutions, no hard and fast rule could be laid down.

If Plato, however, gave a little with one hand, towards the end, he took much more away with the other. In the *Republic*, though he had described at length the only good form of government, he had suggested little specific legislation, on the ground that under the guidance of all-wise governors the mass of the citizens could be permitted considerable latitude in the conduct of their business and the arrangements of their private life. Now, however, while they may be allowed more of a finger in a less hard-baked political pie, their social and economic life is tied hand and foot by a multitude of prescriptions and prohibitions backed by the will of God. There is no more of the insistence in the *Statesman* that law is at the best an unfortunate necessity, and that it must be flexible, easy of repeal, and constantly re-adapted to changing conditions and, so far as possible, to the differences and the merits of individual cases. The code, prescribed by God, is once and for all delivered unto mankind.

But this is not all. Had Plato grown more tender, more sympathetic, and more broad-minded as his piety grew more concentrated and more theological in tone—and it is not impossible that the two growths should occur together—things would have gone better. The laws he laid down, inflexible and all-invading though they were, might still have been the enabling acts of a system of values conceived in as liberal and reasonable a spirit, and tempered with the same Hellenic heritage of balance and moderation and many-sidedness, as characterizes the scheme set forth in the *Philebus*. But Plato, as he aged, seems to have turned, not more humanely, but more austerely, devout. The dualistic, puritanical strain in his nature, which had so long contended within him against his racial naturalism and humanity, had, it would appear, definitely gained the upper hand. And the severity of which he had become the victim broke out, not only in the character of the rules he promulgated for the guidance of human life, but in the oppression and

"strong-arm" methods he advocated for enforcing them. He was now ready to put people to death, if need be, for the glory of God and the Faith.

It has been suggested, to be sure, that the gathering strength of the dialogue towards the close, and the reversion in the twelfth book to the philosopher-kings and the reign of wisdom, contain a promise which Plato did not live to fulfil. We might have seen, we are told, another sunrise of the old genius, in whose radiance the Platonic code would have been justified, not only religiously but rationally, and revealed as the inevitable result of bringing supreme intelligence to bear upon the problems of human society.[29] Be that as it may, the greater part of the work gives the impression of being written before the dawn in the cold, grey light in which the nocturnal council of philosopher-astronomer-kings habitually sat, when it met to determine the destiny and plan the happiness of the world.

The first four books of the *Laws* constitute a triple introduction to the subject, social, historical, and political. Plato begins by pointing out that the state should be organized primarily for peace, not for war, and that the end at which its legal code should aim ought to be virtue rather than mere military efficiency.[30] The cultivation of wisdom, temperance, justice, and courage is the true business of the legislator.[31] Of these four virtues, temperance is most to the fore, as it was in the *Statesman*, since it is the most concerned with withstanding and curbing the inroads of pleasure upon the moral life. The love of pleasure is the most pressing problem for the lawmaker, and stern measures must be devised, not only for dealing with sexual irregularities and excessive drinking,[32] but with the sphere of amusement and relaxation in general. Music, song, the dance, the drama, have a profound ethical effect, and help turn a man to good or ill. Singing and dancing, indeed, are the natural and spontaneous outcries and movements of the body.

29 *Cf.* Barker, *op. cit.*, pp. 342 ff.
30 I, 625 C–631 B.
31 631 B–632 D.
32 636 A–643 A; 645 D–646 B; II, 675 E–674 A.

Hence disciplining them to harmonious and moral melody and rhythm is of great importance. To this end, they should be carefully censored, along with the other arts, and should be judged good or bad, not by a standard of pleasurableness, but according as they conduce to moral excellence, in which alone true enjoyment and true beauty can be found. All dancing should be before the Lord, all singing should be hymns in his honor.[33]

Wine in moderation is a useful means for mellowing the participants in this sacred merriment. The young, to be sure, do not need its stimulation and should be forbidden its use. God has given it rather to the old "to lighten the sourness of old age; that in age we may renew our youth and forget our sorrows; and also in order that the nature of the soul, like iron melted in the fire, may become softer and so more impressionable."[34] But at no age should wine cause us to overstep the bounds of perfect decorum.

We need not pause over this discussion of the arts, except to remember the explanations we gave of Plato's attitude in the Republic. Later, we shall find him even more severe. But for the moment we have to follow him in the historical introduction to which he turns in the third book. The deluge, we are told, left man in an idyllic state, without laws or letters, primitive in his wants and arts, but at the same time peaceful, simple, and more manly, temperate, and just than the men of to-day. Then the evolution of modern society began.[35] At first nomadic and patriarchal in their customs, men eventually turned agricultural, settled in communities, and, though still governed by ancient tradition, felt the need of laws and magistrates. These communities soon grew into cities, such as made war upon Troy, and the cities again federated into kingdoms like ancient Argos, Messene, and Lacedaemon. And these kingdoms, in their turn, formed a confederacy to ward off the Asiatics.[36] But they eventually fell because the rulers lost their sense of the true good, became proud and luxurious, and tended to become despotic. Sparta alone was saved because of

[33] II, 652 A–673 A.
[34] 666 A–C.
[35] III, 677 A–680 A.
[36] 680 B–685 D.

the curb her dual monarchy and the institution of the Ephors, or overseers, laid upon the kingship. Absolute monarchy, however, persisted in Asia, among the Persians.[37]

Meantime Athens had developed democracy, which is the other of the "two mother forms of states from which the rest may be truly said to be derived." [38] Monarchy worked well at first among the Persians, but declined owing to lack of education in their princes and the consequent rise of despotism.[39] So, too, democracy gave a good account of itself in Athens at the beginning. At the time of the Persian invasion the Athenians were a united, law-abiding, and reverent people. But just as despotism enslaved the Persians, so unbridled freedom dissolved Athens. This spirit of license was due in large part to the innovation of the artists. In the good old days the multitude listened in reverent silence, without clapping or hissing, to the traditional forms of music. Then the poets broke away from the conventions. "They were men of genius, but they had no perception of what is just and lawful in music; raging like Bacchants and possessed with inordinate delights—mingling lamentations with hymns, and paeans with dithyrambs; imitating the sounds of the flute and the lyre, and making one general confusion; ignorantly affirming that music has no truth, and, whether good or bad, can only be judged of rightly by the pleasure of the hearer." Furthermore they made their appeal, not to the educated, but to the multitude, and thus inspired the masses with the idea that they were capable of knowing the good from the bad.[40] And this conceit spread to other spheres of life, and begat, first, a spirit of general disobedience, and then the attempt to escape the control and exhortation "of father, mother, elders, and when near the end, the control of laws also; and at the very end there is the contempt of oaths and pledges, and no regard at all for the Gods." [41]

This indictment, which sounds strangely familiar to our ears to-day, suggests to Plato, when taken together with his reflections upon the evils of tyranny, that the best form of government will be a mean between the two extremes of slavery

37 686 A–692 B.
38 693 D.
39 694 A–698 A.
40 700 A–701 B.
41 701 B–C.

and license, and that the legislator should aim at combining freedom with unity and the exercise of intelligence. On this basis he begins, in the fourth book, to construct the framework for the state.[42] There are a few preliminary remarks about the best geographical site and the most desirable sort of population. The site should have "a fair proportion of hill and plain and wood" and be sufficiently distant from the sea to avoid the luxury and the cosmopolitanism that are the curse of a great port and centre of maritime trade.[43] In a later passage Plato adds that it should be set upon a hill, that it should be protected by frontier fortifications but should have no walls, save perhaps a circle of houses capable of use for defense, and that it should be clean and well drained.[44] The population should be Hellenic, but drawn from different races with different institutions, since a stock of a single sort and imbued with a single set of traditions will not lend itself easily to a novel constitution.[45] But, even so, the new system will probably have to be set up by force, and for this purpose it will be necessary to call in a wise tyrant to initiate the new régime.[46]

The government, however, that he will institute will not bear the name of any existing form of political organization. It will be called after God, from whom its laws derive and to whose imitation and service its citizens are dedicated. Its magistrates will be chosen, not from the rich and the strong, but from those who are obedient to the divine commandments. Only that man and that city can flourish which walk humbly with God and fear his justice. For "he who is lifted up with pride, or elated by wealth, or rank, or beauty, who is young and foolish, and has a soul hot with insolence, and thinks he has no need of any guide or ruler, but is able to be the guide of others, he, I say, is left deserted of God . . . and in a short time he pays a penalty which justice cannot but approve, and is utterly destroyed and his family and city with him." Wherefore the wise man is a follower of God, takes him as his measure, and is like him so far as is humanly possible.[47] So, too, the godly state has the Olympian deities and its special patron divinities for its foun-

[42] 701 D–702 E.
[43] 704 A–707 D.
[44] VI, 778 C–779 D.
[45] 708 A–708 D.
[46] 709 A–712 A.
[47] 712 B–717 A.

dation, and the successive storeys in the scaffolding of its pious edifice are reverence, first for the Gods of the underworld, and after them for the lesser spirits and heroes and private and ancestral deities, then due respect paid to parents, both the living and the dead, and finally "the rites of hospitality taught by heaven," and the multitudinous obligations towards one's neighbors.[48]

Into this general frame the more explicit regulations will be fitted, but they will always be tied back into the general scheme by persuasive prefaces explaining their relation to piety and virtue and justifying in this way their mandatory clauses. For example, the laws prescribing and regulating marriage will have a prologue setting forth that marriage is a means to the immortality of the individual in the continued life of the race, and that for a man voluntarily to deprive himself of this gift is impiety and therefore properly punished by the penalties the law prescribes.[49] These introductions will create good-will in people, and by appealing to their understanding will predispose them to obey the commands embodied in the laws. Hitherto, unfortunately, legislators have dispensed with persuasion, and their codes have simply "laid down the law" and coerced men into obedience without giving reasons for their rules and regulations.[50]

We have not, however, quite finished our religious framework. Next to his Gods, a man's soul is his most divine possession, and should be honored next after them. But the soul has a dual nature, "the better and superior, which rules, and the worse and inferior, which serves; and the ruling part . . . is always to be preferred to the subject." Now the better part of the soul is not honored by devices like self-praise and self-excuse and self-indulgence, as men think, or yet by following the easy path and avoiding the difficult, or by clinging to life and fearing death, or by preferring beauty to virtue, or by laying up riches at the sacrifice of honesty. On the contrary, it is being foully dishonored, and its birthright is being sold for a mess of pottage. Worse still, evil-doing is transforming it into the likeness of evil. The glory of man is "to follow the

[48] 717 A–718 B. [49] 718 C–721 E. [50] 721 E–724 B.

better and improve the inferior, which is susceptible of improvement, as far as this is possible." The body also must be honored, not, however, by excessive beauty or size or strength or swiftness, or even health, as some believe, but rather by a mean and moderate amount of these endowments. For too much of them "makes the soul braggart and insolent." [51]

The same is true of an excess of wealth and property and worldly distinction, which breed hatred and envy as well. Once more, reverence for God, for parents, for neighbors, for strangers, and for law is the heritage a man should seek to bequeath to his children. So far as the things the law does not touch are concerned, a man should be brought up to know and to tell the truth; to be generous and without envy, eager to share his goodness and virtue with others; to be brave but gentle; to show mercy to others where their vice is curable, but to be inflexible in dealing with incurable wickedness; to love, not himself, but the right above all else; to recognize and be willing to bow to superior wisdom in others; and to exercise self-control in all matters. Thus he will be safeguarded against the assaults of pleasure and pain, and will turn to the life of virtue as the most truly pleasant life.[52]

The religious and moral scaffolding is now complete, and Plato turns to the code of laws that is to give it body and weight. This code may be divided into two parts, one providing a constitution for the state, the other setting forth the legislation that the governmental machinery is to put into effect. To constitutional law Plato devotes himself first. As we begin with a clean slate, we may assume that we are free from the undesirable elements that trouble ordinary states and from the financial difficulties that harass most governments. Our territory "must be sufficient to maintain a certain number of inhabitants in a moderate way of life," and that number Plato fixes on mathematical grounds at 5040. Communism for all, such as was advocated in the *Republic* for the guardians, would be ideal, but it is impracticable. We must, then, reconcile ourselves to the fact that our constitution will only be second-best.[53]

[51] V, 726 A–728 E. [52] 728 B–734 E. [53] 734 E–739 E.

Since community of property is impossible, some means of equitable distribution must be worked out, and to this Plato devotes the rest of the fifth book. Land and houses will be equally divided, and this equality will be maintained, so far as can be, by laws governing inheritance. Personal property cannot be so equalized, but undue acquisition should be curbed by prohibitions against the possession of precious metals except in the form of currency, and against dowers and the lending of money at interest or secured by promissory notes. Furthermore, all surplus above a certain profit determined by the original value of the individual's lot of land shall be returned to the state. The inevitable inequalities that will creep in in spite of these regulations may, however, be used with political benefit as a basis for class distinctions in dividing up the electorate, and on this basis Plato divides his citizens into four classes. The land itself will be allotted in two sections, one in the city, the other in the country, so that each man may have both a town and a country house. For political purposes the citizens will also be divided into twelve sections or groups.[54]

We next turn to the machinery of government. After describing the provisional measures necessary to set it up, Plato proceeds to develop his scheme. The whole body of citizens, divided into the four classes with which we are already familiar, forms the electorate—subject to the restriction that no one may exercise the suffrage who has not completed his military training. Voting is mandatory upon the two upper classes but optional with the others.[55] Thirty-seven guardians of the law are directly voted for by all alike, by choosing first a provisional list of three hundred and then reducing it by a series of eliminating ballots. A council of three hundred and sixty with seventy representatives from each class is also chosen annually. Here the process of election is much more complicated and involves a combination of selection and elision so arranged that the wealthier classes have more to say in the final choice.[56] This mode of election, Plato tells us, strikes a "mean between monarchy and democracy" such as ought always

[54] V, 740 A–745 E.
[55] *Cf.* VI, 764 A.
[56] 757 A–E. *Cf.* Barker, *op. cit.*, pp. 332 ff.

to obtain in a state. By using it we secure that relative equality which alone is just.[57] The council thus elected will be divided into twelve parts, each one of which will exercise office for a month.[58]

Of the other officers, some, like the generals and the keepers of the temple treasure, shall be elected by the assembly. Others, like the priests, shall be chosen by lot in order that God may participate directly in the choice, and still others shall be appointed.[59] The defense of the city proper is entrusted to the troops under arms; that of the outlying districts is undertaken by a kind of constabulary consisting of groups of wardens and watchers chosen by the different tribes. These are charged not only with maintaining fortifications but with the construction and maintenance of roads, the care of streams and provisions for water supply and irrigation, the building of gymnasiums and public baths, and in general with a minute supervision of the country-side. They will also act as magistrates in minor disputes. Their discipline must be strict and semi-military, and they are enjoined against oppressing in any way the country people.

There shall also be three wardens of the city elected from the highest class by a combination of universal suffrage and eliminating lot.[60] Their duties will resemble those of the country wardens. Three similar officials elected in the same way will have charge of the meeting place of the assembly. Then, too, there must be supervisors of gymnastic exercises and superintendents of schools, and judges of music and singing. But, most important of all, there must be a minister of education. He must be married, and a parent, and be over fifty years old. Elected by the magistrates, he will supervise the whole educational establishment of the state.[61]

Having thus dealt with the administrative branch of the government, Plato turns to consider the judiciary. Differences that cannot be settled by the private mediation of friends will have to be taken to the lawcourts. These courts will be of

[57] 757 A–E. *Cf.* Barker, *op. cit.*, pp. 332 ff.
[58] 758 B–E.
[59] 759 A–760 A.
[60] 760 A–763 D.
[61] 763 D–766 B.

two kinds, according as the suits involve simply individuals or an individual *vs.* the people, and of two degrees, courts of common pleas and of appeal. Each tribe will have its lower courts, the judges of which shall be chosen by lot. The officials shall elect from among themselves the judges of the court of appeals.[62]

The rest of the sixth book is devoted to matters that we may more conveniently treat when we come to examine the code of laws. In the seventh book Plato takes up the question of education. This begins with the proper care of the expectant mother. The early infancy of the child is also important, as then the foundations of physical and moral well-being in later life are laid down. Babies should not be frightened, since cowardice is born of early terrors, and they should also be spared, so far as possible, sorrow and pain. At the age of three, children should begin to play together, and should be taught games and sports. These should be standardized with a view to encouraging moral character, and there should be little or no change and innovation. At the age of six the sexes should be separated, and both boys and girls should learn to play at soldiers and thus learn the rudiments of military training. Useful military exercises like wrestling must also be taught.[63] Generally speaking, the education of girls should resemble that of boys in all respects.[64]

When they are ten, children should be taught to read and write, and from that age till sixteen they should be taught literature and music, which, it goes without saying, should be carefully censored with a view to producing an edifying moral effect.[65] Dancing also must be censored in the same way.[66] Nor can the drama be too carefully supervised. Attendance at comedies may be permitted, since an understanding of the laughable contributes by contrast to the high seriousness in which youth should be bred, but play acting should be left strictly to "slaves and hired strangers." Even the high tragedians should not be licensed to perform their works "until the

62 766 D–768 E.
63 788 A–799 C.
64 805 C–806 C.
65 800 A–804 B; 809 B-813 A.
66 814 D–816 D.

magistrates have determined whether their poetry may be recited and is fit for publication or not." [67]

The same moral purpose must pervade even the higher education of the more mature. Only those studies which are innocent and of benefit to the state can be included in it.[68] Mathematics, even if it has nothing else to recommend it, is at least a wholly innocent and proper subject. Moreover, being an ardent mathematician himself, Plato feels that it is easy for everyone to learn, and even amusing.[69] With the high favor in which Plato holds it as a means of disciplining the mind we are already familiar. We are not therefore surprised to find him once more making it the staple of his curriculum of higher education.

This curriculum follows in many respects that set forth in the *Republic*. First comes arithmetic, which is indispensable to the pursuit of all forms of exact knowledge. Instruction in it should be begun early by means of the arithmetical games for children in use in Egypt. It should be followed by geometry, of which, Plato feels, the Greeks have as yet only the foggiest notion, witness their confusion of the commensurable and the incommensurable—a confusion, we might say, also underlying modern attempts to square the circle. Finally, and here there is a great divergence from the *Republic*, comes astronomy, which Plato now regards as the queen of the sciences and elevates to the position formerly held by dialectic. At this point, too, he interpolates an enlightened protest against considering impious any inquiry "into the supreme God and the nature of the universe . . . and the causes of things" [70]—a protest that he seems presently to forget, as we shall soon see.

But Plato is in a hurry to get to the laws themselves, and lets his scheme of education go at that. In the eighth book, after a short discussion of the religious festivals, major and minor, monthly and daily, that should be instituted as an aid to keeping the people ever in mind of God, and after some re-

[67] 816 D–817 E. The tense of the quotation has been changed.
[68] 820 D.
[69] *Ibid.*
[70] 817 E–822 C.

marks about the necessity of limiting athletics to such exercises as conduce to military proficiency and therefore to the security and welfare of the state, he comes at last to grips with his subject.[71] The first point that he tackles is the regulation of sexual relations. In the sixth book he had already expanded his sample preamble about marriage into ampler form. The purpose of sexual relations, he had there pointed out, was not the happiness of the individual but the preservation and well-being of the community. Therefore marriage was obligatory, or at least could be avoided after the age of thirty-five only under a penalty of social displeasure as well as the payment of a fine. Furthermore, marriages must be so arranged as not only to produce that mingling of opposite qualities advocated in the *Statesman*, but also to equalize inequalities of wealth. Eugenics, too, such as the avoidance of drunkenness and of anything else injurious to the health, must be insisted on during the begetting period.[72] For ten years both husband and wife should soberly, gravely, and advisedly devote themselves to the business of procreating children for the state. Failure to produce should be cause for divorce. Marital disputes on this subject should be punished if they could not be harmonized, and adultery should be severely penalized. And all intercourse, even within the marriage bond, should be frowned upon unless it were for the express purpose of procreation.[73]

In the eighth book this last point is emphasized. Not only does he now frown upon love between members of the same sex, normal to the Greek society of his time, which he had accepted more or less as a matter of course in the earlier dialogues, and had, indeed, considered to be peculiarly well fitted for sublimation into love of the Ideas, but he insists that virginity shall be the rule for both sexes until marriage, that extra-marital relations shall be forbidden, and that even within the marriage tie intercourse, except for reproduction, shall be discouraged.[74] Here Plato seems to have receded from an earlier recognition, intimated in the *Republic*, of the value of

71 828 A–835 D.
72 VI, 773 A–776 C.
73 773 A–776 B; 783 D–785 B.
74 836 B–841 E. *Cf.* I, 636 A–D.

sex as an enrichment of the life of the individual, quite apart from its function of perpetuating the species. In fact, his attitude in the matter has become almost Pauline. Sex is inherently evil, its satisfaction on the physical plane is wantonness pure and simple, and is an obstacle to the salvation of the soul. The avowed purpose of his restrictions is to save people, willy nilly, from the lusts of the flesh, which is now revealed as the arch-enemy of the life of the spirit.[75]

At the same time, when it comes to the point of enforcing these restrictions, Plato shows himself suddenly hard-headed and worldly wise. He sees the uselessness of passing repressive laws on the subject, and advocates indirect means of gaining the desired end. A sentiment in favor of continence must be fostered by education and exhortation. The ideal of the athlete in training should be held before the eyes of youth, and people, generally, should be kept so well exercised and fatigued by hard work that the urge of sex is not felt. Only a population thus trained will be willing to accept laws upholding a high standard in such matters.[76]

The remainder of the eighth book and part of the ninth deal with the laws regulating property and the conduct of business. Of all forms of property slaves make the most difficulty—and with them Plato had already dealt in Book VI. A distinction, he had said, must be made between good and bad slaves, but it should be remembered that bad slaves are often made such by the injustice, distrust, and harsh treatment of their masters. All slaves alike ought to be dealt with fairly and properly. But they should never be treated familiarly, and when they are really at fault they should be punished, not admonished and argued with as if they were freemen. Moreover, it will help matters, if slaves are always foreigners and speak a language different from that of their masters. In these circumstances they are more easily held in subjection.[77]

Turning now to real property we find a number of regulations designed to prevent individuals from encroaching upon one another's land, agricultural products, water-rights, and the

[75] 835 D–826 A.
[76] 839 E–841 E.
[77] 776 B–778 A.

like, and for distributing the produce of the soil among the freemen, the slaves, and the resident foreign population. The actual business of distribution, as well as the carrying on of all handicrafts should be attended to, not by the citizens, but by slaves and foreigners. The citizen is too occupied with securing and preserving the public order of the state to be bothered with buying and selling. Again, each artisan will be sufficiently occupied with attending to his particular trade, and shall be allowed to do one thing and one thing only. So far as the importation and exportation of goods are concerned, there shall be no "tariff walls" and no export duties. There must, however, be a ban on the importation of all luxuries and unnecessary articles, and a similar embargo on the export of anything needed in the country.[78]

Money, of course, is necessary as a medium of exchange, but all buying on credit should be at the seller's risk. No recovery at law will be allowed. Buying or selling in excess of what the law allows will be registered by the state. Subject to these conditions foreigners shall be allowed to settle and conduct their business without taxation. Twenty years, however, shall be the limit of their period of residence, except in exceptional cases.[79]

So far, we have been moving within the domain of what we should call civil law, in which the question of penalties has been largely incidental and has been answered by the payment of fines, or, at the worst, by an extra-legal disapproval on the part of society. Now, in the ninth book, we enter the criminal sphere of major offenses against property, the person, and God, in which the problem of punishment becomes acute. We have on our hands two tasks—first, that of apportioning properly the penalty to the crime, and second, the complication introduced by the difference between voluntary and involuntary acts. The causes of crime and the purpose of punishment have also to be considered.

As methods of punishment Plato proposes degrading exposure in public places, corporal punishment, imprisonment, segregation in some lonely place, and, in extreme cases, death. With

[78] 842 E–849 D. [79] 849 E–850 D.

the machinery of bringing the malefactor into court he is not particularly concerned; but he insists that all criminals shall be apprehended, even for a single offense and even if they have fled the country; and he is at pains to define a method of court procedure that shall ensure the accused a fair and open trial.[80]

But a fair trial involves not only legal and objective considerations but psychological and subjective ones. In the first place, if all men do injustice involuntarily, out of ignorance of their best interests, how can they be held to account for their deeds and justly punished? And, again, how can it be right to subject men to punishments that make them worse off than they were before?[81] Obviously the criminal situation needs to be overhauled. The evil-doer cannot be treated in the cavalier manner in which slaves are doctored. We cannot say simply "you have done this, therefore you must take this."[82] To begin with, the deed must be put in its proper perspective. Its criminality cannot lie simply in the hurt or damage that it does. Benefits wrongly conferred, may be as hurtful as a *bona fide* hurt. Therefore, if objective harmfulness is to be our standard, they may be as wrong and unrighteous as any crime. We must go back of the actual deed to the intention or principle that inspires it, and judge its unrighteousness or criminality by that intention rather than by the hurt it does.

We have, then, in a wrong two different elements which cannot be righted in the same way. The objective element of damage is righted on the principle of an eye for an eye, a tooth for a tooth. What has been taken away can be given back, what has been ruined can be repaired or replaced, so far as possible. But the subjective element of intention, in which criminality resides, cannot be righted by vengeance. Here an eye for an eye is without justification. Retribution must lead to reformation. Punishment must aim at curing the evil-doer. It should kill him, only if he proves to be incurable. On the point that crime is a disease, a blindness, of the soul and should be treated as such, and that the only just punishments are primarily remedial, Plato cannot too strongly insist.[83]

80 855 A–856 A.
81 859 D–861 A.
82 857 B–E.
83 861 A–863 A.

In order to devise the cure the cause must be known. Crime has three sources—passion, which violently forces the soul to action; pleasure, which by deceiving her with a false good persuades her into evil-doing; and ignorance, which may misguide her either through sheer lack of knowledge or through the conceit of a know-it-all. Injustice, or unrighteousness, lies in the domination of the soul by the passions "whether they do any harm or not"; justice, or righteousness, in possessing and obeying knowledge of "what is best for the whole life of man." At the same time, thought may also enter into the commission of a crime, in which case we have premeditation.[84]

But although all evil-doing is involuntary and a kind of disease, and arises from a blinding of the higher part of the soul by passion or pleasure or ignorance, the individual, Plato seems to think, is still morally responsible for his crimes and may justly be called to account for them. Passion and pleasure and ignorance are not external to the soul, and the pressure they bring to bear upon her is not comparable to outer compulsion, or even to the influence of a drug or of insanity. A man acting at the behest of any one of them is acting of himself, and is expressing himself, however misguided that self may be. He is still, as Aristotle was later to point out, "the moving principle" and source of his behavior, and as such is responsible for it, whatever may be the reasons for his being the kind of principle and source he is.[85]

Nevertheless, Plato feels, a man is not so completely responsible for acts committed on the spur of the moment and under the lash of passion or pleasure as he is for those involving premeditation.[86] Both, of course, are involuntary in the sense that they are done in ignorance of the true good. Both show that the soul is blind. But in the one case, we might say, the seizure is sudden and momentary, and the soul quickly comes to herself again and regrets the blindness of her act, although she cannot claim an alibi. Still, such impetuous action is, at least, like involuntary behavior. It runs true to type. In the case of the premeditated act, however, there is a deliberate and

84 863 A–864 C.

85 *Cf.* Barker, *op. cit.*, pp. 352–358.

86 866 E–867 C.

prolonged blindness to the soul's welfare, a storing up of evil intentions, and a lack of remorse when the deed is finally committed, that smack of the rational character of the really voluntary act and resemble the pursuit of the true good.[87] So it is that we find Plato sharply distinguishing premeditated from unpremeditated crime and proposing for it much severer penalties.[88] This distinction is of the utmost importance in dealing with crimes against the person, as, for example, homicide.

With these considerations in mind Plato turns to the details of his criminal code. Sedition, treason, and sacrileges like temple-robbing are all to be punishable by death.[89] Ordinary theft incurs a penalty of repayment of twice the amount stolen.[90] The various degrees of homicide are then reviewed. Even unintentional or accidental homicide requires religious purification and sometimes compensation, but no further atonement is necessary. Most intentional but unpremeditated cases shall be punished by exile for a term of years varying according to circumstances. Premeditated, first-degree murder demands the infliction of the death penalty on agent and instigator (if there be one) alike.[91] Premeditated killing in war, in self-defense, in the defense of one's family or for the protection of one's property or one's honor, or in vengeance for violence done one's chastity, is justifiable and exacts no penalty.[92]

Wounding with intent to kill should rank as murder, but is punishable only with exile for life, except in attempted parricide or fratricide, or in case a slave assaults his master. Wounds inflicted without premeditation but in passion, shall be atoned for by the payment of large fines to the victim. Accidental woundings shall require only suitable compensation.[93] Lesser assaults, such as striking another person, shall be dealt with according to the comparative ages and relationships of the aggressor and his victim—generally by short terms of imprisonment where the aggressor is of lesser rank or age. Perpetual exile awaits the child who strikes his parent. The slave who

[87] 866 D–867 A.
[88] 864 C–867 B–C.
[89] 854 A–855 A; 856 B–857 A.
[90] 857 A–B.
[91] 864 C–874 C.
[92] 874 B–C.
[93] 875 A–879 B.

dares raise his hand against a freeman shall be delivered over to the injured party to be beaten at the latter's will.[94]

The tenth book, to which we now pass, is one of the most important and the most famous in the *Laws*. As we already know, it reveals the final theological phase of Plato's metaphysical system. It is an able presentation of the theistic case; it portrays a deity—or deities—of a very high moral order; and it abounds in splendid passages that catch, like clouds at sunset, some of the radiance of the old Platonic manner. At the same time, it is a sullen and an angry sky in which the sun of Plato's genius is setting. We see him suddenly standing there in the lowering light of an incredible intolerance—an almost sinister figure, hard-shelled, crabbed, fanatical, and harsh, incapable of brooking any interpretation of the universe except his own, and ready to cram his beliefs down other people's throats even if he has to choke them to death in so doing.

Still, there are clearer and softer lights in the picture, which ought not to escape us. After all, Plato is logical to the end, and advocates no more than every theologian ought to favor, who sees in the fabric of the world a clear theological pattern with which the strands of human righteousness and happiness are, to his eye, inextricably interwoven.[95] For, in such circumstances, the pattern that strikes the eye so convincingly is not merely the only true but the only right pattern. It alone can supply the configuration of human life that leads to salvation. To make it equally obvious and dominant for others is, then, no mere intellectual exercise. It is the highest duty one man can perform towards another, and in fulfilling that duty force ought to be employed where persuasion fails. So, too, the detection of any other pattern in the universe implies more than an innocent wandering and play of the mind among different combinations suggested by the warp and woof of events. It means that the soul has got hold of a false clue to living, a pattern that, if taken to heart, will throw her moral life into disorder and imperil her safety, not only here on earth, but hereafter.

Anybody, then, who is wholly convinced of the exclusive truth

[94] 879 B–882 C.

[95] *Cf.* Barker, *op. cit.*, pp. 367–368.

of the particular theological pattern he sees in things ought to consider heresy the gravest of crimes, dislocating, as it does, the only right scale of values, and evoking ideals and standards inimical to the social organization prescribed by that pattern. And he ought, if he has the courage of his convictions, to act accordingly, and rigorously to put down disbelief wherever he finds it. The hesitation to take strong measures, felt by so many otherwise devoted adherents of this or that creed, and the tolerance they display, are really weakness masquerading as virtue, and a mistaken kindness at that, since indulgence towards the dissenter is fatal to his best interests. Plato, for all his seeming harshness, is more rational, once his premises are given, more honest, and, if we take into account the damage done the soul by heresy, more humane. He sees the logical implications—or is it the *reductio ad absurdum?*—of his, or, for that matter, of any too assured theology. There are no sentimental mists in his evening light. If that light is hard and sinister, it is at least clear.

Moreover, it must be remembered that Plato regarded forcible suppression of heresy as a last resort. Every resource of argument and persuasion was first to be employed to make the nonconformist see the rationality of the Platonic point of view. Only if he could not be convinced of its soundness by an appeal to his intellect and common sense, were drastic measures for ensuring conformity to be used.[96] Though this cannot be said to have mellowed the atmosphere, it made it perhaps a little less black and forbidding.

With the tenets of Plato's theology we are already familiar. Heresy, naturally, consisted in a denial of one or all of its three cardinal points[97]—the existence of the Gods,[98] their righteousness, justice, and providential direction both of the world and of human affairs,[99] and the incorruptibility of their administration and their justice by fawning prayers and sacrifices.[100] Doubt on any of these points was blasphemy, but it was less insolent to believe that the Gods did not exist at all

96 885 B 889.
97 885 B 889.
98 899.
99 899 D–905 D.
100 905 D–907 A.

than that, existing, they lolled in idleness, careless of the welfare of the universe and of mankind. Worst of all, however, was the so-called religious attitude which, professing to believe in their existence and their righteousness, sought to flatter and cajole them by offerings and incantations into dealing leniently with sin, "as if wolves were to toss a portion of their prey to the dogs, and they, mollified by the gift, suffered them to tear the flocks." [101]

In dealing with these three heresies, we must distinguish those disbelievers whose moral character is above reproach, and who are exemplary citizens, from those "who besides believing that the world is devoid of Gods are intemperate" and immoral in their behavior, though quick-witted and tenacious in their mental processes. The former are not so dangerous, since they are loose only in thought and conversation, but the latter breed all sorts of intellectual and moral pestilence, tyrants, demagogues, generals, sophists, hypocritical and venial priests, and celebrants of unholy mysteries.

The punishment of heretics must be apportioned accordingly. Arrested on the information—and informing is made compulsory upon all citizens—of whoever hears or sees an impious word or deed, the accused shall have the degree of his guilt determined by the magistrates. Minor cases shall be punished in the city gaol, along with common offenders. The morally upright and open disbelievers shall be sent for a period of five years to a "House of Reformation" near the meeting place of the "nocturnal council" which is here mentioned for the first time. There they shall be held in solitary confinement save for visits from the nocturnal council, "and with them let them converse with a view to the improvement of their soul's health." Such as have been converted by these talks may be restored to society at the end of the five years' term, but those who remain unconverted, and are condemned a second time, shall be put to death. As for the hypocrites, however, who privately disbelieve, but make a pretense of religion, and "in contempt of mankind conjure the souls of the living and say they can conjure the dead and promise to charm the

[101] 907 A.

Gods with sacrifices and prayers, and will utterly overthrow individuals, and whole houses and states for the sake of money" —let them be sent for life to a special prison "in some wild and desolate region in the centre of the country," and after death let their bodies be cast out unburied beyond the frontiers of the country.[102]

As a further preventive of heresy there should be an established cult, conducted in public temples by an accredited priesthood. All private and household cults should be strictly forbidden. Shrines should not be permitted in private houses, and all citizens should be required to pay their religious devotions in the places of common worship. Once more, it is obligatory upon all citizens to report any infraction of this rule. Failure to comply on the part of the accused shall be penalized. The celebration in a spirit of levity of any rite, be it in private or in public, shall be punished by death.[103]

This discussion cannot but impress painfully the reader of Plato. Perhaps its most pettily disagreeable feature is the system of espionage and information which it makes mandatory upon all the citizens of the ideal state. Nor, apparently, is the spying and the informing to be confined to cases of heresy. Again and again this duty of the citizen is insisted upon. Indeed, in the fifth book there is a comprehensive passage dealing with this point in which a double crown of virtue is conferred upon the just man who also "informs the rulers of the injustice of others," and the palm is awarded to him "who co-operates with the rulers in correcting the citizens as far as he can."[104] This is to turn the whole body of citizens into a self-constituted anti-vice society of amateur private detectives, and to diffuse throughout it a general spirit of mutual surveillance such as is advocated and exemplified to-day by the theory and practice of our modern unofficial organizations for suppressing vice or for inflicting a pet code of morality upon the state at large. From one point of view, of course, and to a certain degree, Plato's requirement is reasonable enough. But it is an open question whether the greater part of the evil

[102] 907 A–909 D.
[103] 909 D–910 E.
[104] 730 D.

detected and suppressed in this way is not less harmful both to the state and to the character of the individual than are the manner of ferreting it out and the incidental assumption of police power by private persons. Certainly, if the behavior of our modern anti-vice leagues is any index, the kind of corruption sown in otherwise reputable persons by the spirit of spying and informing seems to be far worse than most of the corruption it corrects. And it is permissible to feel that a fairly large degree and wide diffusion of dissoluteness and impiety among a citizenry are preferable morally to the universal prevalence among them of the attitude and the activities recommended by Plato.

In the eleventh book Plato returns from heaven to earth and busies himself with sundry details. Laws regarding property are elaborated, and rules governing restitution and disputed ownership are laid down. Trade and finance are once more discussed, buying on credit is again denounced, price-fixing is arranged, and measures to protect against fraud, adulteration, and false representation are proposed. Retail trade, because it encourages a desire for undue profits, must be controlled and licensed, and limited to strangers, and extortion must be forestalled by determining the permissible profits. Contracts must be enforced, and non-fulfilment of them ought to be taken before the lawcourts, and to be punished by a fine of double the original amount involved.[105]

The willing of property should be subjected to legal restrictions. The "dead hand" must not be allowed to interfere unduly with the living. Inheritance will be arranged so that the "one man, one lot" system is interfered with as little as possible. This may require adoption of an heir or the cutting off a son who is already possessed of a house. When a man dies intestate, his daughters shall be married off in such wise as to preserve the lot system. If there are no children the next of kin shall inherit. Orphan children shall be wards in chancery under the charge of the guardians of the law, who shall see to their education and the management of their property. Finally, there shall be a tribunal of magistrates

[105] 913 A–922 A.

or a special court to settle all difficulties arising in these matters.[106]

Plato next considers laws regulating family life. In case of dissension between father and son, the son may be disowned, if the family consents. If disowned, he must seek adoption in another family, failing which he must emigrate. An insane man is to be restrained from the control of his family and his property. Divorce with the condition of re-marriage may be granted to a husband and wife who cannot agree. Widowers with children should not remarry. Otherwise they must. Widows with children should not remarry unless they are "too young to live virtuously without a husband." Parents must be cared for by their children, and their wishes must be respected by them, for the figure "of a father or a grandfather or a mother stricken by years" is a wonderful thing, "far higher than that of a lifeless image." Neglect of parents shall be punished by "stripes and bonds" if the faulty children are young, otherwise by severe penalties determined by a court of elders. Here, too, private informing of such neglect is the duty of any one who observes it.[107]

After a discussion of attempted injury by sorcery or poison, in the course of which Plato once more insists upon the preventive and remedial, rather than the retributive function of punishment, and after arranging for the care of madmen under restraint, Plato takes up what we to-day might call libel laws. "No one shall speak evil of another . . . for out of the imprecations which men utter against one another and the feminine habit of casting aspersions on one another, and using foul names . . . the greatest enmities and hatreds spring up." Nor shall men cast ridicule upon one another. Good-natured satire, however, may be allowed the poets, subject to the permission of the minister of education.[108]

The book closes with some odds and ends of legislation. Begging is prohibited. The responsibility of the owner for damage done by his slaves or domestic animals is discussed. Rules regarding witnesses in the lawcourts are drawn up and

[106] 922 A–928 D.
[107] 928 D–932 D.
[108] 932 E–936 B.

penalties provided for perjury. Specious pleading on the part of lawyers is forbidden. The unscrupulous lawyer who receives fees for taking a shady case shall be deported, if a foreigner, put to death, if a citizen.[109]

Finally, in the twelfth and last book Plato takes up such crimes against the state as false reports on the part of heralds and ambassadors and the theft of public property. He then proceeds to treat of offenses against military discipline, like disobedience, refusal to bear arms, desertion, and cowardice, and also considers certain rules necessitated by international relations. Desertion and the dodging of military service shall be tried by a military court and punished at the court's discretion. Generally speaking, it may be said that Plato in most cases advocates leaving to the judge the determination of the penalty, rather than prescribing it by law. Cowardice, since unfortunately it is impossible to change the coward into a woman, is best punished by fining him and cashiering him permanently from the service. Trials for cowardice, however, should be carefully conducted, and informers should be certain, before lodging complaint, that the action was not accidental or prudent rather than craven.[110]

The question of international relations is delicate. Plato's aim is to keep his state pure and undefiled by foreign influences. It would be better, he feels, if each community were hermetically sealed from its neighbors and there were no international intercourse whatsoever. However, given the world as it is, and states as imperfect as they are, the harm done by emigration, immigration, and travel is of no consequence. Absolute isolation and the measures necessary to maintain it would give a city a reputation for churlishness and barbarism in the eyes of the world, which is to be avoided. In these circumstances, we must make the best of the situation. This we may do by forbidding all citizens under forty to travel abroad in a private capacity. Heralds, ambassadors, and the like will, of course, have to be sent to foreign cities. Moreover, to keep an eye on the rest of the world it is desirable to despatch "spectators," or, as we should say, intelligence officers, to other

[109] 936 C–938 C. [110] 941 A–945 A.

countries, who may observe and report upon anything they think of interest or advantage to their own city. These officers shall make their reports to the "nocturnal council," which here makes its bow for the second time, and the success or failure of their missions shall be judged and requited according as they return home personally the better or the worse for their experience.[111]

So much for regulations with respect to citizens leaving the country. Now as to immigration. Foreigners shall be divided into four kinds—the casual trader, the visitor to festivals, the official representative, and the intelligence officer, or spectator. The first class shall be decently and hospitably treated, but kept apart as much as possible, and allowed to make no innovations. The second shall be properly entertained, but their sojourn shall be limited. The third shall be received with the honors due their position. The fourth, presumably older men, shall be given every facility for acquainting themselves with what is good in the city, and on their departure shall be sent away with gifts and other marks of respect.[112]

We might now suppose that the Platonic code was complete. But Plato keeps having after-thoughts, and now wanders back to such subjects as private property, the constitution of the lawcourts and the conduct of funerals, with which last item, fitly enough, he finally does write *finis* to his rules and regulations. Going surety for another and searching houses for property in dispute, the propriety of statutes of limitation where property is concerned, the principle that possession is nine points of the law, intimidation of witnesses, the reception of stolen property and of exiles, bribery, private warfare, taxation, and the proper cost of offerings to the Gods—all receive his attention. The machinery of the law is next on the list. Cases between individuals shall be tried first before arbiters agreed upon by both parties. From their decision appeal may be taken to the tribal courts, of which, he repeats, there are to be twelve, one for each division of the land. Finally the case may be carried to a high court of selected judges. Too frequent appeal is prevented by the rule that where the decision

111 949 C–952 D. 112 952 D–953 E.

of the lower is upheld by the higher court, the defendant shall be liable for increased damages. The lower courts may reasonably be entrusted to younger judges. All judges should be learned in the law of the land and should regard their function as that of healers and correctors, giving their judgments accordingly, and condemning to death only the incurably wicked. Their decisions shall be enforced within a month at the peril of the loser in the case being deprived of all his goods. Contempt of court is punishable by death.[113]

We leave now the living to bury the living beneath this mass of legislation and come to the dead. Cemeteries should be in out-of-the-way spots on land that cannot be used for cultivation. Funerals should be simple, and their cost should be legally fixed. A representative of the law should be present to see that all is properly attended to. Noisy mourning and the exhibition of the corpse in the open street had better be forbidden.[114]

Two problems still remain to be solved. In the first place, how are the magistrates entrusted with the enforcement of the laws to be kept up to the mark? Secondly, how are the laws themselves to be preserved, kept irreversible, and handed down, a faith once and for all delivered unto the saints, from generation to generation? The first problem Plato solves by an incidental suggestion, sandwiched into the international part of the code. There shall be a corps of examiners or censors, or, as we might call them, inspectors-general, which, after its first institution, shall be added to yearly by the election of three members selected from the most esteemed citizens of over fifty years of age. The highest honors shall pertain to this office, and its occupants shall hold it on good behavior till they have reached the age of seventy-five, when they shall be retired. At death they shall receive a splendid public funeral if they have proved faithful to their trust. Their function shall be continually to oversee the work of the magistrates, whom they have the power to remove from office, to penalize as they see fit, and even to condemn to death. Any magistrate, however, who feels that he has been unjustly dealt with, may appeal his case and

113 953 E–958 C. 114 958 C–960 B.

cite the examiners before a selected court. If the court acquits him, he may then lodge a complaint against them. Otherwise let such part of his original sentence as admits of being doubled be assessed twice over against him.[115]

The examiners, it will be noted, are a political after-thought of Plato's and are absent from his system of government as he first develops it. So, too, in providing for maintaining the laws as irreversible as Fate, Plato introduces another and more important innovation, which seems, as we have already remarked, to betoken a tendency on his part to return to the philosopher-kings of the *Republic*. The "nocturnal council," after a fitful and casual dawning, at last emerges into the light of day. To it will be entrusted the duty of maintaining the constitution and the laws intact. To this end it will be composed of the ten oldest guardians of the law, "all those who have obtained prizes of virtue," and the spectators, or intelligence officers, who have visited foreign countries. To these shall be added an equal number of eminent young men, nominated, one each, by each of the elders. Thus we shall have a body combining age and youth, mind and sense, perception and reflection, and knowledge of home affairs with that of the outside world, which will be expert in the ends and means of true statesmanship and authoritative in the inculcation of true virtue.[116]

To govern the state well and lay down the nature of what is right, the members of this nocturnal council must, of course, have undergone a special training calculated to acquaint them with the four forms of virtue and with the unity that underlies the four. They must know the nature of the good and the honorable, and must be profound theologians versed in all the evidence and all the arguments for the existence of the Gods and the providential government of the world. A correct understanding and use of these arguments pre-supposes, in its turn, an acceptance of the doctrine of the priority and immortality of the soul-principle and of its direction of the physical world. And this again is best inculcated by studying the wonders of astronomy, since in the exactitude of the movements of the heavenly bodies the proof that "mind is the orderer of the uni-

[115] 845 B–948 B. [116] 961 A–965 A.

verse" is seen in its most convincing shape. Further than this we cannot at present go in exactly determining the education or the powers of our nocturnal council of astronomer-guardians. We are taking a chance, to be sure, in letting it go at that, but the best thing we can do is, "if this our divine assembly can only be established," to hand our city over to them. Thus our dream of the best practicable state, which we have just set forth, may perhaps become a reality.

We should perhaps add a final word about the *Laws* from the point of view of the history of jurisprudence and education. The Academy as we have already seen, was primarily a school of political science, and therefore also a law school. Most of the rules and regulations Plato laid down were based upon the codes of the various Greek cities and particularly upon contemporary Athenian law. He was frequently asked for advice by colonies, or by long established states that were engaged in framing or altering their constitutions. The *Laws*, then, may well have been a codification of such existing law as he considered desirable, with additions of his own devising. As such it became the basis of Hellenistic law, and later an important source of Roman jurisprudence. So, all of our modern codes, to the extent that they are founded upon Roman law or are influenced by it, are remote descendants, in part or whole, of this last work of Plato's which we have just been studying.[117]

Again, it has been pointed out that, from the point of view of the education, Plato's proposals in the *Laws* amount to the establishment of a system of primary and secondary education, as we should call it to-day. His scheme of organization was embodied in the educational institutions of the Hellenistic period, and passed thence to Rome and eventually to the grammar schools of the Middle Ages. If, then, the founding of the Academy made Plato the father of the modern university, he might also claim by way of the *Laws* to be the father of our modern system of secondary education.[118] Modern, too, is his keen interest in child psychology, his advocacy of education,

117 *Cf.* Burnet, *op. cit.*, p. 302 ff., 225 ff. Barker, *op. cit.*, pp. 295–296.
118 *Cf.* Burnet, *op. cit.*, p. 311. Barker, *op. cit.*, p. 373.

even of the higher sort, for women, and his combination of the schools for boys and girls alike with gymnasia and playgrounds.[119]

III

At the end of our long journey through the Platonic philosophy we may stop for a moment and review briefly the more general contours of the spectacle of all time and existence that has slowly been unfolded before our eyes. Naturally, our memorandum must be of the sketchiest kind—a thing of headings and headlines "featuring" merely the "high spots" of our discussion and designed simply to label the successive stages of our tour. The first thing to be noted is the question whether the earlier dialogues set forth Plato's own doctrine, or whether those preceding the so-called "critical" group must not rather be regarded as an exposition of Socrates' teaching. In view of this doubt our decision to stick to the traditional opinion and to treat all of Plato as Platonic was, we may remember, a matter of convenience rather than of dogmatic conviction.

We next took up the three avenues, emotional, moral, and intellectual, by which we approached Plato's central doctrine of the Ideas. An analysis of love, of moral conduct and social organization, and of the process of knowledge showed in each case that none of them made sense or had real validity unless such things as beauty, goodness, and truth had a real existence of their own, independent and apart from the passing show of events in which they were enacted. The fact that we were not indifferent spectators of the world, but were passionately attracted by or interested in much that we found there, presupposed, as we saw in the *Lysis*, the *Symposium*, and the *Phaedrus*, the existence in and for itself of an absolute and universal quality of loveliness whose presence in things made them lovable. Again, in the *Republic*, we found knowledge mounting straight away from disordered and meaningless subjective sensation, through a growing confidence in the objective meaning of experience, to a recognition of its stable and organized character and a working out of rough and ready rules expressive of its re-

[119] Barker, *op. cit., loc. cit.*, also p. 380.

liable behavior; and thence to a *scientific* apprehension of the universal and changeless laws and principles underlying these rules, and eventually to a *dialectical* grasp of the interlocking of these principles in a single coherent system. Unless, then, the universe had a real intelligible structure embedded in its sensible stuff, knowledge, we decided, would be a farce, and science and philosophy would both be futile.

The approach to the Ideas by way of ethics proved to be more tortuous. In the *Protagoras* and the *Gorgias*, we had first to clear the ground of such misconceptions of the nature of the good as the hedonistic doctrine of pleasure, be it of the moment only, or in the long run. Then, in order to determine the nature of righteousness in the individual, we had first to discover it on a larger and more easily readable scale in the state. This involved us in the *Republic* in an elaborate and detailed study of the structure of an ideal commonwealth, in an interesting analysis of the psychology of the individual, and incidentally in a discussion of the place of the fine arts in the moral life. But at length we reached a definition of justice, or righteousness, as we may call it, that would hold good in all times and places, for particular men and for human society alike. Hence we concluded that moral standards, like aesthetic values and the laws and forms in which knowledge comes to rest, were universal, immutable, and eternal things.

Turn, then, where we might in experience, we always found beneath the confused and agitated surface of the flux a stable pattern of abstract and universal laws, types, forms, values and the like, which the flow of sensible phenomena was continually re-exemplifying. This pattern was suffused throughout with a quality of rationality in whose light it assumed a single Form of its own which was more than the mere aggregate of the particular laws and values that composed it. There was, then, a kind of Form of Forms, a general "lay of the land," that gave focus and perspective to the constituent features of the ideal landscape. This underlying principle of unity, Plato called the Idea of the Good. Since the system of Forms, both in its wholeness and in its details, was unalterable, imperishable, simple and self-identical, and was everywhere and

at all times the same, it might seem to have a reality far superior to that of the perishable, composite, ever-changing and ever-dissolving local and temporary physical objects that received being and name from embodying it. Indeed, the solid, tangible, material element in things seemed on the point of vanishing into comparative, if not absolute, nothingness.

But this centring of reality in a supersensible world of Forms or Ideas, inevitable though it was, involved Plato in many difficulties. In the first place it raised the problem, mentioned in the *Parmenides*, of Ideas of evil and ugly things. Science demanded that such Ideas exist, since the evil and the ugly were capable of explanation; but aesthetics and ethics could not tolerate anything that destroyed, as the existence of such Ideas would destroy, the essential beauty and moral goodness of real existence. This problem Plato almost entirely ignored.

Again, the relation of the Ideas to the minds that entertained and to the sensible objects that embodied them had to be worked out, and the physical world had to be kept from evaporating into sheer illusion. The first of these questions we found Plato answering in the *Meno* and the *Phaedrus* with his famous doctrine of knowledge as recollection. We were, to be sure, confined to the senses for all we knew, and the senses never perceived anything but particular sensible data. But our minds, having been conversant in a pre-natal existence with the Ideas, still remembered them after birth, and were reminded of them by the data introduced by the senses. Thus the sensible world could suggest to the mind the existence of an intelligible order. This doctrine, as we also saw, involved Plato in a theory of immortality in which were commingled the notions of timeless union with the eternal, of limited and comparatively short periods of personal and temporal survival, and finally of a prolonged process of reincarnation, not of personality, but of moral character. These concepts he developed in the *Phaedo*, the *Phaedrus*, and in myths in the *Gorgias* and the *Republic*.

The ability of an alien medium, like the flux, to enact the Ideas in sensible objects Plato tried to explain by such meta-

phors as those of imitation and participation. Such figures of speech, Aristotle immediately pointed out, did nothing to solve the problem. Indeed, Aristotle continued, Plato's theory of Ideas had merely split the universe in two, and left each half incapable of uniting in any way with the other. The intelligible half merely reduplicated but did not explain the sensible half. At the back of this criticism lay the feeling that Plato conceived the Ideas as having an original, enacted metaphysical existence of their own outside the particular sensible objects that embodied them—a feeling that has persisted to this day and is the traditional and conservative interpretation of the Platonic position.

In view, however, of the difficulties created by such an interpretation, we found some modern scholars attacking it and claiming that Plato intended to attribute, not a metaphysical, but a logical existence only, to the Ideas. The status of the Ideas was not that of divine "substances," but that of natural laws and moral and aesthetic ideals, which, although they are different and separable from their particular, sensible examples, are never found in operation elsewhere. In other words, apart from the sensible phenomena that enacted them, the Ideas were not in themselves a drama, but merely the script of the play. The amateur presentation of them by the world of sense was the only *presentation* they received. They were not also being enacted professionally outside the flux by an ideal, all-star cast in a kind of metaphysical New York. For, if they had to be conceived not merely as a script equally appropriable by all comers, but also as a troupe of actors, copywriting, staging and reciting it, then they could not possibly be in their heaven of a New York and in a thousand places "on the road" in the sensible world at one and the same time. Conceive the Ideas, however, not as a professional, all-star, "first-night" production of the world-drama but simply as its script, and as a script, at that, not written on any particular paper, or confined to a particular author's mind, and the difficulty would cease. As script pure and simple, any number of "copies" of them could co-exist, each one of which contained the play in its entirety. Any number of particular presentations could share

the same script without dividing it up, and could stage it as a whole simultaneously in any number of particular sensible theatres without self-contradiction. In that case, imitation and participation would be excellent metaphors, and the doctrine of recollection, instead of being fantastic, would be an accurate psychological description of the sense of recognition of a long-lost friend that accompanies the solution of a problem or the hitting on a truth. These points, we were further told, were recognized by Plato, and the *Parmenides* was an attempt on his part to clear himself of the misconception that he considered the Ideas metaphysical substances, and to make it plain that he regarded them only as logical essences. In view of this controversy we left the question of the status of the Ideas open and turned from the *Parmenides* to the other critical dialogues.

There we found Plato reviewing in the *Philebus* the ethical situation and endeavoring, not only to re-state the ingredients of the good life, but to determine with mathematical precision the proportions in which the elements should be mixed. This, taken together with certain reports and criticisms of Aristotle, led us to consider the last phase assumed by the Ideas in Plato's mind—that of mathematical formulae. Difficult as certain aspects of the question were, we concluded that Plato was merely trying in his way to realize the ideal of modern science, and to express in the equivalent of our curves and equations the behavior of nature and of man alike.

We next passed to problems connected with the existence and nature of the sensible world. The falsification of Reality by appearance raised the problem of error, with which we found Plato struggling in the *Theaetetus*, and the more general question of the possibility of making negative statements, to which the *Sophist* was devoted. Negation, we discovered, indicated difference of one sort of being from another, not absolute not-being; and this discovery salvaged for us the real existence of the sensible world. The fact that sensible objects were *not* the Ideas, no longer excluded them from the sphere of reality. It merely put them on a different, though *real* footing. What this footing rested on we had now to explore.

We were thus led in the *Timaeus* to develop a theory of the

material principle in which the sensible world is grounded. Here we found the mathematical interest strong in Plato, and an attempt on his part to conceive matter in geometrical terms and to reduce it to empty space. But another problem also pressed for an answer. The sensible world was full of life and motion for which a cause had to be discovered. This could be found neither in space, which was a purely passive receptacle, nor in the Ideas, which, however we regarded them, were static, motionless entities. A third principle had, then, to be introduced to explain motion, and for this purpose Plato brought forward the soul, now conceived as an uncreated, self-originating, self-moving source of life and motion. In the later dialogues furthermore we found him tending to personify her and to make of her a personal Creator, designing all things for the best. This theological trend was especially explicit in the *Timaeus*, and in the *Laws*.

The reduction of matter to empty space, and the lodging of the origin of all motion and activity whatsoever in the soul-principle raised a final problem. The imperfection of the sensible world could no longer be attributed to the inferior nature of its substratum. Empty space was neutral and equally receptive of any form or motion that might be introduced into it. The cause of imperfection, then, could only lie in the Ideas or in the soul-principle. The question suggested in the *Parmenides* had raised its head again. But Plato could still ignore it, seeing that he had soul at his beck and call. Since she was the origin of all life and motion, to her must be referred the movements that interfered with the accomplishment of design and purpose, as well as those that furthered it. She had, then, to be of two sorts, a better and a worse. It was the inferior kind of soul that made things go wrong in the universe. This view, we may remember, was set forth in the *Laws*, the political portion of which is so recent in our minds that we need not review it.

Side by side with this explanation, however, lay a persistent tendency to attribute to matter a positive, obstructive inertia, and particularly to oppose the body as the source of evil in human life to the soul as the source of good. And a further

complication was introduced by a somewhat vague appeal to human free-will as a means of shifting the blame for human imperfection from God to man himself. But this solution was largely nullified by the insistence that in this life we are only reaping what we have sown in former existences. Nor did it ever emerge from the state of myth.

The Platonic metaphysics, then, magnificent as it was, we found to be loose-jointed and inconclusive in many respects. Behind this lack of complete articulateness we divined a nature at odds with itself. On the one hand, we saw that Plato fell heir to the great naturalistic, Pagan tradition that regarded the distinction between moral good and evil as merely a metaphysically superficial difference between the wise direction and the foolish misdirection of the same identical activities and energies, and sought human salvation not in the freeing of one portion of our nature from another, but in the harmonious co-operation of all the faculties with which man is naturally endowed. But, on the other, we found him equally heir to the mystical, Orphic tradition that divided the human being into two hostile camps, the body and the soul, and regarded the attainment of the human good as essentially a liberation of the one from the bondage of the other. Torn between the natural inclination to regard the flesh and the sensible world as a joy and the dualistic, supernatural command to deliver oneself from them as from a burden, Plato, we felt, was never at peace with himself or consistent in his picture of the spectacle of all time and existence. If anything, it seemed, the puritanical, non-naturalistic strain in him prevailed as he grew older, though even then we could not forget that in so late a work as the *Philebus*, which was perhaps inspired by a revival of Hedonism within the Academy, he appeared to be trying to formulate a scientific and unbiased ethical theory.

In spite, however, of this conflict in Plato's character and the obscurity and division of critical opinion that surrounded many of the most important points in his system, we could never lose sight of the grandeur of his work. The mists of controversy and indecision, through which his true meaning so often appeared darkly, did no more than swirl about the feet of

towering peaks that came as near to storming Heaven as man has ever come.

IV

On Plato's death the leadership of the Academy fell to his nephew Speusippus, and again, eight years later, to Xenocrates, who outlived Aristotle. Of the lesser philosophical lights of the Academy at the time, such as Heracleides, and the astronomers, Philip of Opus and Eudoxus of Cnidus, we know little. Since this is the case, it is perhaps best to postpone our consideration of Speusippus and Xenocrates until we come, as we hope to do in a later book, to the history of the Academy as a whole. It is sufficient to remark here that they turned mathematical and mystical in their interpretation of their master, emphasized the Pythagorean elements in his teaching, and set rolling the stone of Neo-Pythagorean and Neo-Platonic speculation which gathered so much moss in Graeco-Roman times.

# APPENDIX

# I. CHRONOLOGICAL TABLE

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| 493 B. C. | First Persian Expedition against Athens. Abortive, however, because of the destruction by a storm of the Persian fleet. |
| 490. | Second Persian Expedition under Darius. Signally defeated at the battle of Marathon. |
| Circ. 490. | *The philosopher Empedocles born at Acragas (Agrigentum) in Sicily; the philosopher Leucippus at Miletus or Elea; the philosopher Zeno, later a pupil of Parmenides, at Elea in Southern Italy. The philosopher Heracleitus in his prime at Ephesus in Asia Minor.* |
| 490—480. | Growth of the power of Athens. Banishment of the statesman Aristides. Athenian policy in the hands of Themistocles. Building of the fleet. A congress held to decide on steps for coping with a new threatened Persian invasion. |
| Circ. 483. | *The philosopher Gorgias born at Leontini in Sicily.* |
| Circ. 481. | *The philosopher Protagoras born at Abdera in Thrace.*[1] |
| 481. | The historian Herodotus born at Halicarnassus in Asia Minor. |
| 480. | The poet Euripides born at Salamis. |
| 480—475. | *The philosopher Parmenides at his prime in Elea.* |
| 480. | Third Persian invasion of Greece, under Xerxes. Battle of Thermopylae. Advance of the Persians to Athens. Defeat of the Persian fleet by the Athenians at Salamis and subsequent retreat of the Persian armies. |
| 480. | Defeat by Syracuse and Acragas, at the battle of Himera, of a Carthaginian attack on Sicily. |

[1] The birth of Protagoras, however, is placed as early as 500 B. C. by Burnet. *Cf. Greek Philosophy,* pp. 111–112.

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| 478. | Athens now the most powerful state in Greece. Defensive alliance against Persia of the islands of the Aegean under the hegemony of Athens, known as the Confederacy of Delos. |
| Circ. 478. | *The philosopher Xenophanes* still alive in Sicily at the court of the tyrant Hiero of Syracuse. |
| 471. | The historian Thucydides born at Athens. |
| 471—469. | *The philosopher Socrates born at Athens.* |
| Circ. 470. | *The philosopher Melissus born at Samos.* |
| 468—461. | Struggle for power between Cimon and Pericles at Athens, ending in the banishment of Cimon and the ascendency of Pericles. |
| 462. | *The philosopher Anaxagoras called to Athens by Pericles.* |
| 461—431. | Transformation by Pericles of the Confederacy of Delos into the Athenian Empire. Extension of the Empire. Growth of commerce and wealth. Athens at the zenith of her power and brilliance. The Periclean Age and Circle. A "Golden Age" of art and literature, adorned by the poets Sophocles and Euripides; the historians Herodotus and Thucydides; the philosophers Anaxagoras, Protagoras, and the youthful Socrates; the painters Polygnotus and Panaenus; the sculptors Myron, Phidias, Paeonius, and Polyclitus; and Mnesicles and Ictinus, the architects of the Parthenon and the Propylaea. The "long walls" connecting Athens with the Peiraeus built. |
| Circ. 460. | *The philosopher Democritus, the pupil of Leucippus, born at Abdera in Thrace.* |
| 456. | The poet Aeschylus died at Gela in Sicily. |
| Circ. 454. | Removal of the treasury of the Delian League from Delos to Athens. An important step in converting the League into an Empire. |
| Circ. 450. | *Final uprising in the southern Italian cities against the Pythagorean Theocracy. The lodges of the Brotherhood were burnt, the members massacred, and the survivors fled for their lives, many of them to Thebes and elsewhere in Greece.* |

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| Circ. 450. | *Birth at Megara or Gela of the philosopher Euclid, pupil of Socrates and founder of the Megaric School.* |
| Circ. 449. | *Visit of the philosophers Parmenides and Zeno to Athens. Interview with the youthful Socrates.* |
| Circ. 448. | The poet Aristophanes born at Athens. |
| Circ. 444. | *The philosopher Empedocles, in his prime, visited Thurii, where he probably met Protagoras and Herodotus.* |
| 443. | The politician Thucydides (not the historian), a political opponent of Pericles, banished, leaving Pericles supreme. The subject-allies of the Confederacy now frankly taxed for Athenian purposes. |
| 440. | *Incidentally to an unsuccessful attempt of the island of Samos to secede from the Empire, Athenian naval forces were defeated by the Samian fleet commanded by the philosopher Melissus of the Eleatic School.* |
| Circ. 440. | *Birth of Antisthenes, later a pupil of Socrates and founder of the Cynic School.* |
| Circ. 435. | *Birth at Cyrene in north Africa of Aristippus, later a pupil of Socrates and founder of the Cyrenaic School.* |
| 432. | *The philosopher Anaxagoras tried at Athens for materialistic views regarding the nature of the sun and the moon. Thrown into prison, he escaped and fled to Lampsacus on the Hellespont, where he died soon afterwards, highly respected and honored by his new, more liberal fellow-townsmen.* |
| 431. | Outbreak of the long-drawn-out Peloponnesian war between Athens and Sparta. The popularity of Pericles already on the wane. |
| Circ. 430. | *The philosopher Empedocles died; place unknown, but probably not in Sicily.* |
| 429. | The Plague in Athens. Death of Pericles. |
| 427. | *The philosopher Plato born at Athens.* |
| 427. | *Advent at Athens of the philosopher Gorgias at the head of an embassy from Leontini* |

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| | *and her allies to ask for help against Syracuse.* |
| 421—416. | Truce between Athens and Sparta. Political ascendency of Alcibiades, the pupil and friend of Socrates. |
| 415. | Launching by Athens of the great "Sicilian Expedition" against Syracuse; the war with Sparta, also, having been renewed. |
| 413. | Decisive defeat of the Athenians at Syracuse. Revolt of Chios, Lesbos, and Miletus against Athenian domination. Beginning of the break-up of the Athenian Empire and of the decline of Athenian power. |
| Circ. 411. | *Protagoras tried for impiety and exiled from Athens. Shipwrecked and drowned en route for Sicily.*[2] |
| 409—404. | Great Carthaginian expedition against Sicily. Initial success. Himera, Selinus, and Acragas destroyed. Dionysius became tyrant of Syracuse. Carthaginian advance on Syracuse. |
| 406. | The poet Euripides died in Macedonia. |
| 405. | The Athenian fleet beaten and destroyed by the Spartans under Lysander at Aegispotami. |
| 404. | End of the Peloponnesian war. Surrender of Athens. Razing of the "long walls" and destruction of the fortifications. Athens reduced to a subject-ally of Sparta. Sparta now the dominant power in Greece. |
| 404. | Conclusion of peace between Carthage and Syracuse, by which the Carthaginians retained considerable territory and influence in Sicily. |
| 404. | The poet Sophocles died at Athens. |
| 404—403. | Establishment of an oligarchy at Athens. The Thirty Tyrants. Reign of terror. |
| 403. | Overthrow of the Oligarchy and re-establishment of the democracy at Athens. |
| 399. | *Trial and execution at Athens of Socrates on* |

[2] The story of Protagoras' trial and exile is rejected by Burnet, who places his death in the early years of the Peloponnesian war. *Cf. Greek Philosophy,* pp. 111–112.

*charges of impiety and corruption of the youth by his teachings.*

399—395. *Plato, along with other pupils, left Athens for political reasons. Many, Plato among them, took refuge with Euclid at Megara. Further possible travels of Plato in Egypt and Cyrene. Possible return to Athens about 395.*

399—394. Sparta at war with Persia, as result of Persia's retaliatory expedition against Greek cities of Asia Minor that took part in the Anabasis of Cyrus. The Persian satrap, Tissaphernes, defeated by the Spartan King, Agesilaus. Persia in revenge stirred up Corinth against Sparta. Corinth joined by Thebes, Argos, and Athens. Aided by the Persians, the allies defeated the Spartan fleet at the battle of Cnidus (394) and inflicted so severe a check upon the nominally victorious Spartan army that the victors could not exploit their success, but retired to the Peloponnesus. The Athenian admiral Conon rebuilt the "long walls" with the aid of Persian money and men.

391. The Carthaginians were all but expelled from Sicily by Dionysius I.

395—387. *Possible further travels of Plato. Composition of the earlier dialogues* Euthyphro, Apology, Crito, Charmides, Laches, Lysis, Euthydemus, Protagoras, Gorgias, *and* Meno, *and possibly the* Symposium *and the* Phaedo, *the first part of the* Republic *and* Phaedrus.

387. *Plato's first trip to southern Italy and Sicily. Visited the Pythagoreans and particularly the philosopher Archytas at Tarentum. At the invitation of Dion, brother-in-law of Dionysius I of Syracuse, he extended his visit to Sicily and stayed at the tyrant's court. As the result of a quarrel with his host, he was sold into slavery, ransomed by a friend and returned to Athens.*

387. Peace of Antalcidas between the Greek states and Persia. Greek cities of Asia Minor abandoned to Persia. Athens retained islands of

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| | Lemnos, Imbros, and Scyros. Foundations of second Athenian Empire laid. |
| Circ. 387. | *Plato founded his Academy at Athens.* |
| 387—367. | *Plato taught at Athens. Composition of the rest of the* Republic, *of the* Theaetetus *and the* Parmenides. |
| 385. | *Birth of the philosopher Aristotle at Stagira in Thrace.* |
| 383. | Birth of the anti-Macedonian orator Demosthenes. |
| 382. | Birth of Philip of Macedon. |
| 379—362. | Wars between Sparta and Thebes. |
| 378. | Athens joined Thebes against Sparta. New Athenian Empire formed, consisting of a confederacy of seventy communities. Spartans repeatedly defeated at sea by the Athenians. |
| 377. | *Death of the philosopher Euclid, the founder of the Megaric School.* |
| 371. | The Battle of Leuctra. The Spartans signally defeated by the Thebans under Epaminondas. Sparta made peace with Thebes and Athens. |
| 371—362. | Hegemony of Thebes. |
| 370. | The Peloponnesus invaded by the Thebans under Epaminondas and Pelopidas. Sparta aided by Athens. |
| 369. | Second Theban invasion of the Peloponnesus. |
| 367. | Third Theban invasion of the Peloponnesus. |
| 367. | Death of Dionysius I of Syracuse. Accession of Dionysius II under the tutelage of his uncle Dion, Plato's friend. |
| 367. | *Plato's second trip to Syracuse, to instruct Dionysius II, at Dion's behest, in the art of government, and incidentally with the hope of trying out the theories of government expounded in the* Republic. |
| 367. | *The youthful Aristotle came from Macedon to Athens during Plato's absence, and became a student at the Academy.* |
| 366. | *Plato after an unfortunate and unsuccessful sojourn at Syracuse, embittered by Dionysius' exile of Dion, returned to Athens.* |

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| 365. | *Death of the philosopher Antisthenes, founder of the Cynic School.* |
| 362. | Fourth Theban invasion of the Peloponnesus. |
| 362. | Battle of Mantinea. The Thebans successful, but Epaminondas killed. General peace made among all Greek states, from which Sparta alone held aloof. |
| 361. | *Plato's third trip to Syracuse at the invitation of Dionysius II, and in the hope of reconciling the tyrant with Dion. This trip as unsuccessful as the second. Plato finally disillusioned in his hopes of Syracuse. Quarrelled with Dionysius. Remained for a year virtually a prisoner.* |
| 360. | *Plato returned to Athens.* |
| Circ. 369—360? | *Plato probably wrote the* Sophist, *and the* Statesman. |
| 359. | Accession of Philip II to the throne of Macedon. |
| 357—356. | *With the approval of Plato, Dion fitted out an expedition against his nephew Dionysius II. The expedition successful. Dionysius fled and Dion seized the city, only to be assassinated by his fellow-pupil at the Academy, Callippus.* |
| Circ. 356—347? | *Plato wrote the* Timaeus, *the* Critias *and the* Laws. |
| 357. | Philip of Macedon, extending his power in Thrace began his encroachment upon Athenian possessions. Alliance with Olynthus against Athens. |
| 357—355. | As a result of the so-called Social War of the Athenian League against Athens, the second Athenian Empire began to fall to pieces. Chios, Cos, Rhodes, and Byzantium revolted successfully and established their independence. |
| 356. | Birth of Alexander the Great. |
| Circ. 356. | *Death of the philosopher Aristippus, the founder of the Cyrenaic School.* |
| 355. | Beginning of the second Holy War by Thebes, Locris, and Thessaly against the Phocians, who had plundered the temple at Delphi. Philip |

of Macedon interfered in the struggle and defeated the Phocians.

352. Philip advanced as far as Thermopylae where he was opposed and his progress temporarily checked by an Athenian army.

351. Demosthenes delivered his first "Philippic," warning Athens against the rising power of Macedon.

348. The Chalcidic towns in Thrace, leagued with Athens against Philip, were insufficiently supported by her, and were conquered by him one by one.

347. *Death of Plato at Athens.*

346. Peace of Philocrates, by which Athens tamely ceded all occupied territory to Philip. Philip pushed through Thermopylae, advanced to Delphi, and had himself elected to the Amphictyonic Council.

# II. BIBLIOGRAPHY

Thoroughgoing and critical studies of the period covered by this volume will be found in the histories of Ancient Philosophy by Zeller and Gomperz.


Th. Gomperz. *Griechische Denker.* 6 vols. 1903–1909. English translation: *Greek Thinkers.* 4 vols. 1901–1912.

E. Zeller. *Die Philosophie der Griechen.* 6 vols. (Editions of the different volumes from 1869 to 1909.) English translations of all but the last volume. *Pre-Socratic Philosophy.* 2 vols. 1881. (*Cf.* Vol. II for the Sophists.) *Socrates and the Socratic Schools.* 1 vol. *Plato and the Older Academy.* 1 vol. *Aristotle and the Earlier Peripatetics.* 2 vols. *The Stoics, Epicureans, and Sceptics.* 1 vol.


Interesting discussions may also be found in:


A. W. Benn. *The Greek Philosophers.* 2nd ed. 1914. *The Philosophy of Greece.* 1898.

J. Burnet. *Greek Philosophy, I. Thales—Plato.* 1914.

L. Robin. *La Pensée Grecque.* 1923.


For briefer treatment the histories of Cushman, Rogers, de Ruggiero, Thilly Ueberweg, Weber, and Windelband may be consulted.

Some of the more specialized discussions are as follows:

*On the Sophists.*


Grote. *History of Greece.* Ch. LXVII.

Bodrero. *Protagora.* 2 vols. Bari, 1914.


*On Socrates.*


E. Boutroux. *Socrate.* Orleans, 1883.

E. Dupréel. *La Légende Socratique et les Sources de Platon.* Brussels, 1922.

A. E. Taylor. *Varia Socratica.* First Series. Oxford, 1911.

*On Plato.*

R. D. Archer-Hind. *Timaeus of Plato.* London, 1888.

E. Barker. *Greek Political Theory. Plato and His Predecessors.* London, 1918.

J. Burnet. *Platonism.* Berkeley, 1928.
*Plato's Phaedo.* Oxford, 1913.

R. G. Bury. *The Philebus of Plato.* Cambridge, 1897.

G. Grote. *Plato and the other Companions of Socrates.* London, 1875.

F. Horn. *Platonstudien.* 2 vols. Vienna, 1904.

W. Lutoslawski. *The Origin and Growth of Plato's Logic.* New York, 1897.

P. Natorp. *Platos Ideenlehre.* Leipzig, 1903.

R. L. Nettleship. *Lectures on the Republic of Plato.* New York, 1901.

H. Raeder. *Platons Philosophische Entwickelung.* Leipzig, 1920.

L. Robin. *La Théorie Platonicienne des Idées et des Nombres d'après Aristote.* Paris, 1908.

J. A. Stewart. *The Myths of Plato.* London, 1905.
*Plato's Doctrine of the Ideas.* Oxford, 1909.

A. E. Taylor. *Plato.* New York, 1927.

U. von Wilamowitz-Moellendorf. *Platon.* 2 vols. Berlin, 1920.

# INDEX


Absolutes, the, 249
Academe, 163
Academicians, antagonism toward, 171
Academy, Plato's, 163, 251, 461, 469
Adeimantus, 215, 219
Aegina, 161
Aeronautics, Archytas and, 159
Aeschimes, 175
Aeschylus, theory of suffering, 211
Aesthetic interests, 345
Aesthetics, 230, 238
Agathon, 45, 192, 194
Agathyrsians, 245
Agnosticism, of Protagoras, 19
Airplane, Archytas' invention, 159
Alcibiades, 44, 47, 147, 148, 192, 196; wickedness of, 52
America, realism, 258
Americanism, 258, 259
Anarchy, 267
Anaxagoras, 4, 21, 56, 80; Socrates and, 46
Animals, creation, 402
Anniceris, doctrines of, 132, 140
Antisthenes, 94, 162; as disciple of Socrates, 120; doctrines of, 99, 138; interest in ethics, 105; lack of understanding of Socrates, 100; logical conclusions, 103; ostentatious simplicity, 95; view of marriage, 109
Apollo, Socrates as the apostle of, 49
*Apology,* 203
Appearance *vs.* reality, 82
Appetites, Plato's theory, 262, 274
*A priori* methods of Protagoras and Gorgias, 37
Archelaus, Socrates a pupil of, 46
Archytas, 158, 177, 178
Arete, 129
Aristippus, 95, 116, 161; as disciple of Socrates, 118; doctrines of, 121, 133, 139; influence of Protagoras on, 118; personal characteristics, 117; theory of the goodness of pleasure, 126
Aristocracy, 429
Ariston, 145
Aristophanes, 45; ridicule of Socrates, 50; theory of love, 193
Aristotle, criticism of Platonic Ideas, 307, 311; definition of justice, 214; student of Plato, 170, 172; treatise on Archytas, 159
Arithmetic, 251
Army, in the state, 221
Art, Plato's criticism of, 226; Plato's theory, 168, 232; Socrates believed to be antagonistic to, 72
Artificial objects, Ideas of, excluded from Forms, 307
Artificial *vs.* natural, in Cynic philosophy, 112
Aspasia, 47, 64, 243
Aster, Plato's poem to, 153
Astronomy, 251
Athenian generals, trial of, 44
Athens, alliance with Leontini, 30; at time of Plato, 142, 147, attitude of other Greek states toward, 5; democracy in, 7, 153, 437; King's Peace of Antalcidas, 162; "School of Hellas," 169; seclusion of women, 63, 245
Atlantis, 398
Atomists, 46

Beautiful, the, 345
Beauty, love and, 194, 200; Pythagorean doctrine of, 78, 81

Becoming, 293, 341, 403
"Being" in Plato's theory of knowledge, 164, 169, 292, 325, 365, 403
Berkeley, George, and Gorgias, 36
Birth control, in Plato's society, 244
Body, Orphic-Pythagorean theory, 280; pleasure and the, 271
Bolshevism, 258, 259
Brotherhood, Universal, 246
Buddhist concept of immortality, 337

Callicles, 37, 209, 211
Callipus, 179
Capitalism, 255
Cause, the, 375
Cebes, 48, 80
Censorship, Plato's, 224, 228, 231
Cephalus, 215
Chaeronea, Battle of, 65
Chaerophon, 48, 210
Change, 367
Charioteer, soul as a, 324
Charmides, 47, 145, 148
*Charmides,* 203
Children, state rearing of, 244; teaching of, 219
Christianity, concept of immortality, 337; debt to Cynic philosophy, 111; in Plato's ethics, 211
Cimon, 163
Citizen, 256
Class-concepts, in Cynic and Cyrenaic philosophy, 103, 123, 141
Classes, division of state into, 221
"Classical" system of education, 10
Cleinias, 204
Cleisthenes, 51
Cleon, 147
*Clouds, The,* 50
Code of laws, Plato's, 440, 455; criminal, 450
Codrus, 145
College, Plato's, 162
Commonwealth, Platonic ideal, 398
Communism, Plato's theories, 246, 255, 440
Comparison between objects, presupposed by inductive method, 75
Conduct, Protagoras' theory, 24; Plato's theory, 164; *See also* Morality
Consciousness, continuity of, 334
Constitutional law in Plato's code, 440
Contradictory propositions, 104
Courage, 260
Cowardice, trial for, 457
Crates of Thebes, 97; views on marriage, 110
Cratylus, 150, 190; cited, 359
Creation, 398
Crete, timocracy, 264
Crime, causes of, 449
Criminal code, 450
Criminals, methods of punishment, 447
Critias, 47, 145, 148, 398; wickedness of, 52
Critical dialogues, 343
*Crito,* 203
Cynic (term), 96
Cynic philosophy, 94–115, 190, 245, 257, 279; anarchistic in application, 138; bizarre and exaggerated features of, 110; fallacies, 105; Socrates' inspiration, 101; strong points of, 111; superseded by Stoic, 98
Cynosarges, school for bastards, 96, 162
Cyrenaic philosophy, 115–141, 190, 205, 257; fallacies of, 127, 134; more rational than Cynicism, 114
Cyrenaics, practice of their philosophy, 129; view of life, 139
Cyrene, 116

Dancing, ethical effect, 435
Dead, laws relating to the, 459
Death, 195, 224; existence after, 328
"Death's Advocate" (nickname of Hegesias), 131
Delium, 150
Delphic Oracle, and Socrates, 48
Democracy, 258, 267, 429, 433; Athenian, 7, 153; Socrates' antagonism to, 50; a tyranny of the mediocre, 6

Democritus, 4, 21, 22, 80; physical conception of Reality, 56; views on ethics, 41
Demosthenes, 145
Determinate, the, 375
Dialectic, 59, 77, 169, 252, 255, 296, 301
Dialogue, Socratic, 60
Dialogues, Plato's, 157, 164, 171, 173, 182, 192; critical, 343
Diet, 239
Difference, 367; and identity, 373
Dinner-party, immortalized by Plato, 45, 192
Diogenes, 96; views on marriage, 110
Diogenes Laertius, 99
Dion, 159, 170, 173, 177; expedition against Dionysius, 179
Dionysius I, 159, 173; treatment of Plato, 161
Dionysius II, 179, 180; tutored by Plato, 119, 173, 177
Discord, and harmony, 274
Drama, Plato's, 152; Plato's criticism of, 225
Drones, 266, 268
Dualism, Orphic, 278; Plato's, 148, 340, 346
Dyad, doctrine of the indeterminate, 388, 405

Earth, Pythagorean theory, 158
*Ecclesiazusae,* 244
Economic order, Cynic view of, 108
Education, effects of democracy on, 9; Greek, 149; Plato's theories, 162, 222, 239, 242, 251, 443, 461; virtue and, 204, 210
Eleatic philosophy, Euclid's attempt to fuse with Socratic teachings, 90, 137, 316; Gorgias' attack on, 32
Eleatics, 3, 28, 37, 80; theory of Reality, 200
Elements, 400
Emotions, modern theory and the Cyrenaic view, 133
Empedocles, 4, 21, 31, 56, 80; Gorgias a disciple of, 29; Socrates and, 46
Epaminondas, 174
Epicureans, 2; and Cyrenaic doctrines, 133
Equality, sex, 243
Erixymachus, 192, 193
Error, origin of, 360
Essences, 331, 340. *See also* Logical essence theory
Ethics, Antisthenes' interest in, 105; as opposed to individualism, 24; Cyrenaic theory of, 124; Gorgias' treatment of, 31; Plato's, 164, 202–89; Socrates as the father of, 86, 89; Socratic, 58, 66, 67, 91
Euclid of Megara, 48, 89–94, 156, 200; attempt to fuse Socratic and Eleatic teachings, 90, 137; doctrine of the Good as the One, 92
Eudemus, 179
Eudoxus, 170, 282
Eugenics, 431, 445
Euphuism, 30
Euripides, 244; as friend of Protagoras, 18
Evil, 203, 205, 211, 345; problem of, 394, 413
Exercise, 239
Existence after death, 328
Experience, 188
Exports, embargo on, 447
External conditions: unimportance of, in Socratic ethics, 79; in Cynic ethics, 100, 106

Fall, the, 326
False proposition, an impossibility in Cynic logic, 105
Family, Plato's theories, 244; laws regulating, 456
Fascism, 258, 259
Feeling, in the Cyrenaic philosophy, 124
Feminism, 243, 244
Fixity, 368
Flux, 3, 21, 151, 185, 186, 187, 190, 200, 302, 304, 391
Flying-machine, Archytas' invention, 159

Forms, Platonic, 206, 226, 298, 304–19, 406; as a single whole, 367; as metaphysical beings, 310; as numbers, 382; eternity of, 305; nature of, 299, 304; relation to their sensible particulars, 351. *See also* Ideas
Forms, Pythagorean, in Socrates' philosophy, 73, 76, 79, 80, 84, 86
Four Hundred, episode of the, 18, 148
Freedom, 259, 267; art and, 236; Cynic view of, 108
Friendship, Greek ideal of, 64; Platonic, 192

Geometry, 251, 410
Germany, Kultur, 258
Girls, education of, 443
Glaucon, 215, 218
God, place in Platonic system, 374, 378; and matter, 393–423
Gods, lesser, 401; Protagoras' views on, 19
Good, the, 101, 114, 164, 205, 278, 300, 308, 345, 463; as pleasure, 121, 124, 212, 271; as the One, 92; beauty and, 194; God identified with, 420; knowledge of, 208; nature of, according to Aristippus, 133; Socrates' failure to define, 136, 137; Socratic, 316; status, 315. *See also* Virtue
Good life, composition of, 284
*Gorgias,* 209, 273; as a spokesman for Leontini, 30; as a teacher of oratory, 31; attack on Eleatic philosophy, 32; conservatism of, 37; ethical theory, 67; integrity of, 13; life, 29; pan-Hellenism of, 31; scientific views, 31
Government, Cynic theory, 108; Plato's theory, 165, 170, 215, 221, 240, 424; machinery of, 440; Thrasymachus' theories, 40
Great Britain, political education, 254
Greek Anthology, poems purporting to be Plato's, 153
Gymnastic, 239

Happiness, 211, 218, 241
Harmonics, 252
Harmony, 274, 285, 331
Health, 239
Hedonism, Aristippus the father of, 133; Plato's criticism of, 273
Hegesias, doctrines, 131
"Hellas, School of," Athens as, 169
Heracleitean philosophy, 3, 73, 80, 151, 185, 358. *See also* Flux
Heracleitus, on the unreliability of the senses, 21; Socrates and, 46
Heresy, 452; punishment for, 453
Herodotus, 5
Hesiod, Greek religion and, 228
Higher education, curriculum of, 444
Hippodamus, 18
History, interest in, 5
Home, Plato's theories of the, 244
Homer, Plato's criticism of, 227, 228
Homosexuality, 64, 193
Human beings, 351
Human body, 402
Human nature, 273, 351
Human society, artificial figment according to Cynic philosophy, 106
Humanities, 166
Humanity, 351
Hume, David, 25; and Gorgias, 36
Hygiene, 239

Idea of life, 331
Idea of the Good. *See* Good
Ideals, Ideas turn into, 309
Ideas, as mathematical formulae, 378–92; Platonic, 185, 236, 249, 304–19, 344; as mental concepts, 352; as quasi-divine beings, 316, 327; metaphysical interpretation of, 307; relation to knowledge and sense, 320–42, 462. *See also* Forms
Identical judgments, 104
Identity, 373
Ignorance, as the root of all evil, 66; complete, 282, 296
Images, ideas condense into, 309
Immigration, 458
Immortality, Orphic-Pythagorean

doctrine of, 76; Plato's doctrine, 197, 329, 332, 337, 464; Socrates belief in, 58, 195
Imports, ban on, 447
Indeterminate, the, 375, 399, 405
Indeterminate dyad, doctrine of the, 388
Individual as the measure of all things, 23, 27, 28; Cyrenaic interpretation of doctrine, 122, 124; division into three parts, 79; Socrates' impatience with doctrine, 59
Individualism, 267
Individuality, 256
Inductive method, 75; used by Socrates, 61
Inheritance, laws of, 455
Injustice, 214, 263
Intelligent cause, 376
International relations, 457
Intersection theory, 81, 322
*Ion,* 203
Ionia, liberalizing influence of, 4, 17
Ionian cities, struggles between rich and poor in, 6

Judiciary, 442
Justice, 214, 218, 261, 274; Diogenes' conception of, 110; Socrates' conception, 66; Socrates' investigation of, 60; Thrasymachus' conception, 39

Kant, Immanuel, and Gorgias, 36
Karma, 334, 337
King's Peace of Antalcidas, 162
"Know thyself," 62, 65
Knowledge, 202, 284; and rebutting, 343; as opinion, 360; as perception, 357; as recollection, 77, 327, 464; of numbers, 381; Plato's theory of, 290–303; Protagoras and, 29; relation of the Ideas to, 320–42; virtue as, 65, 68, 78
Kultur, 258, 259

Laches, 44, 203
Law, supremacy of, 424, 433
Law courts, rhetorical trickery in, 8
Laws, Plato's code of, 440, 444, 455; criminal, 447
*Laws,* 230, 281, 393, 431, 435
Leontini, alliance with Athens, 30
Lethe, 336
Leucippus, 22
Libel laws, 456
Liberty. *See* Freedom
Life, Nature of, 331; philosophy of, 186
Limit, 379, 399
Literature, education and, 167, 223, 225, 231; Plato's contributions to, 152
Locke, John, and Gorgias, 36
Logic, Megarics' game of, 92, 137; Socrates' contribution to, 86, 88
Logical essence theory, 313
Logos, Heracleitean philosophy of, 3, 73, 80; Plato and, 151, 185
Lot system of inheritance, 455
Love, Platonic, 182–201; Pythagorean doctrine of, 77
Lysis, 174
*Lysis,* 192
*Lysistrata,* 244

Macedon, relations with Greece, 144
Magistrates, 459
Magna Graecia, liberalizing influence of, 4, 17
Man, Plato's theory of, 164; as the measure of all things. *See* Individual as the measure of all things
Many, the, 354; logical quibbles on, 93, 137
Marcus Aurelius, quoted, 186
Marriage, Cynic view of, 107, 109, 110; eugenic control of, 430, 445; Plato's theories, 244
Materialists, 365
Mathematical formulae, the Ideas as, 378–92
Mathematics, in education, 251, 254; Plato's faith in, 168, 288, 379, 381
Matter, form of, 410; God and, 393–423; the source of evil, 414

Mechanistic theory of the universe, Socrates' opposition to, 57, 58
*Medea,* 244
Medicine, as a source of remuneration, 15; Pythagorean theory of, 79
Megarics, 88–94, 137, 200
Melissus, 22; on Reality, 32
Melos, Athenian tyranny toward, 39
Memory. *See* Recollection
*Meno,* 208
Metaphysical beings, Ideas as, 310
Metaphysical system, Plato's, 393, 451, 468
Metaphysics, in government, 165; in Platonic philosophy, 283; Socrates' system of, 59, 82, 89
Milesian School, 3, 80
Military discipline, punishment for offenses against, 457
Mill, John Stuart, 28; use of "inductive" method, 61–62
Mind, 165, 196; in the Platonic system, 339; Sophist views on, 56, 58
Mixture, the, 375
Mohammedan concept of immortality, 337
Monarchy, 171; constitutional, 429
Moral character, survival of, 334
Moral interests *vs.* science, 345, 350
Moral life, government and, 165
Moral principle, 206
Morality, Callicles on, 38; Cynics' attention focussed on, 99; Platonic theory, 202, 214, 219, 230; Sophist doctrine of, 24; standards of, 41; utility as basis for, 70. *See also* Ethics; Good; Virtue
Motion, 367; reverse and disorderly, 396
Music, in education, 223, 225, 239
Mysticism, beauty and, 195, 196; in Platonic philosophy, 281, 285

Natural *vs.* artificial, in Cynic philosophy, 112
Natural laws, Forms identified with, 311
Natures of things. *See* Forms
Necessary *vs.* the superfluous, in Cynic philosophy, 113
Negations, Ideas of, excluded from Forms, 307
Neo-Platonism, 315
Neo-Platonists, 2
Neo-Pythagoreans, 2
Nicias, 147
Nietzsche, Friedrich, philosophy, compared to Callicles', 38
Nirvana, 338
Nocturnal council, 460
Nominalism, 103, 123, 141, 257
"Not," 373
"Not being," in Plato's theory of knowledge, 292, 364, 396, 404
Number. *See* Mathematics
Number-Form. *See* Forms as numbers
Numbers, Pythagorean, 305

Oligarchy, 265, 429
*On the Gods,* 18
One and Many argument, 353, 373
Oneness, 353
"One-story" school of criticism, 316
Opinion, 293; knowledge as, 360
Opposites, interdependence and alteration of, 330
Oracle. *See* Delphic Oracle
Oratory, as an end in itself, 29; Gorgias as a teacher of, 31
Original sin, 326
Orphic concept of immortality, 337
Orphic movement, 52
Orphic-Pythagorean philosophy, 47, 58, 76; Plato and, 157, 280
Orphic *religieuse,* 341
Orphism, Plato and, 157, 280; Pythagoreanism and, 157, 279; Socrates and, 46
Otherness, 367, 373, 404

Paganism, 278, 285
Pain, pleasure and, 205, 212, 271
Painting, Plato's criticism of, 227
Pan-Hellenism, 246; Gorgias' vision of, 31
Pareto, cited, 380
Parmenides, Euclid's admiration

for, 90; on Reality, 22, 32; on the unreliability of the senses, 21; Socrates and, 46, 47; view of reason, 56
*Parmenides,* 344
Participation, doctrine of, 321, 322, 344
Passion, 193, 199
Passionate friendship, military use of, 65
Pausanias, 192, 193
Pausole, rules of conduct, 24
Peloponnesian War, 143, 146
Perception, 323; Gorgias' explanation of, 31; knowledge as, 357
Pericles, 147, 169; as patron of Protagoras, 18
Perictione, 145
Persia, Sparta and, 142
Personal survival, 329, 332, 336
*Phaedo,* cited, 55
Phaedrus, 192, 198
*Phaedrus,* 200, 280
*Philebus,* 281, 282
Philip of Macedon, 144
Philip of Opus, 432
Philistus, 175
Philolaus, 158
Philosopher-king, 165, 246, 251, 252; rule of, 428, 432
Philosophy, compared to stock market, 1; Gorgias' criticisms of, 31; in government, 247; Protagoras' skepticism regarding results of, 29
Philoxenus, 161
Phocis, 145
Physical beauty, 195
Place, 406, 414
Plane geometry, 251
Plato, Academy, 163; ancestry and family, 145; Antisthenes' contradiction of his metaphysics, 103; as disciple of Socrates, 48, 151; critical difficulties, 343–77; description of a dinner-party, 45; Dion and, 179; Dionysius I and, 160; disapproval of Cynic philosophy, 109; dislike of Antisthenes, 96; education, 149; effect of Peloponnesian War on, 146; effect of Socrates' death on, 154; ethics and politics, 202–289; Ideas, 304–19; Ideas as mathematical formulae, 378–92; Ideas, relation to knowledge and sense, 320–42; influence of Orphic-Pythagorean philosophy, 157; Italian journey, 158; last days, 180; later political theory, 424–69; life and times, 142–81; on Socrates' last moments, 55; philosophy of, 164, 182, 202; refuge in house of Euclid, 90, 156; theology: God and matter, 393–423; theory of knowledge, 290–303; tutor of Dionysius II, 119, 174; view of Protagoras the man, 26
Platonic dialogues, 157, 164, 171, 173, 182, 192; Socratic teachings in the, 73
Platonic Form, 206
Platonic Ideas, 185, 236, 269, 304–19
Platonic love, 182–201
Platonic theory, "two-story" interpretation of, 310, 316, 327
Pleasure, as the Good, 121, 124, 205, 271, 282; Cynics' disapproval of, 107; Cyrenaic and Cynic views compared, 114; immediacy and intensity only gauges of, 126; psychology of, 133; Socrates' enjoyment of, 45
Plutocracy, 265
Poetry, Plato's, 152; Plato's criticism of, 225, 227
Political theory, Plato's, 220; Plato's later, 424–69
Politicians, in democracy, 268
Politics, ethics and, 165; Plato's interest in, 153, 170; Plato's theories, 202–89
Polus, 210, 270
Population, limit of, 241
Poseidon, 145
Possibility, Megaric concept of, 93
Poverty, ruling class and, 241, 267
Power, 210
Pragmatism, Protagoras as a forerunner of, 27

Pre-existence, doctrine of, 326, 333
Pre-natal vision, 324
Pre-Socratic epoch, 2
Probation, earthly life a state of, 325
Procreation, 244
Profane love, 193
Promiscuity, 245
Property, laws regulating, 446
Protagoras, application of philosophy to life, 25; conservatism of, 28; debate with Socrates, 204; doctrines of, 19, 67, 357; elaboration of the Heracleitean doctrine, 21; influence on Aristippus, 118; integrity of, 13; lack of literary remains, 19; life, 17; Plato's portrait of, 26; putative exile, 18; view of reason, 56; view of the individual as the measure of all things, 23, 27, 28
*Protagoras,* 204, 273
Providential direction of the universe, Socrates' belief in, 58, 83
Prussia, Kultur, 258
Psychology, Cyrenaics' contribution to, 140; sex, 194
Punishment aimed at cure, 448
Purgatorial periods, 325
Puritanism, art and, 238; Plato's, 226, 228; Socrates', 279
Pyrilampes, 145, 150
Pythagoreanism, division of men, 270; doctrine of "forms," 73; doctrine of transmigration, 330; numbers, 305; Orphism and, 279; Plato and, 157; Socrates and, 46, 320; theory of types, 221. *See also* Orphic-Pythagorean philosophy

Quibbling, philosophical, 92

*Ransom of Hector, The,* 160
Realism, 234, 258, 259
Realistic-nominalistic controversy, 103
Reality an infinite plurality, 354; appearance *vs.,* 82; as a single intelligible whole, 308; conception in physical terms, 56; Eleatic view of, 28, 200; Gorgias' view of, 32, 33, 34; Megaric view of, 93; Parmenidean theory of, 90; Platonic theory of, 140, 164, 252, 291, 295, 300, 302, 304, 316, 347, 366, 375, 464; Protagoras' view of, 29; Socratic theory of, 79; Sophist views on, 22, 56, 80
Reason, soul and, 262; as the good, 275; in Platonic philosophy, 281
Reasoning, 299
Rebirth, 325
Recollection, 323, 333, 336; knowledge as, 77, 327, 464; Plato's doctrine of, 208
Reflection, 275; Gorgias' explanation of, 31
Reincarnation, 208, 325, 326
Relative Terms, Ideas of, excluded from Forms, 307
Religion, Cynic view of, 108; in education, 223; Plato's censorship of, 228, 242
Reminiscence, doctrine of, 327, 330, 333, 336
*Republic,* 215, 226, 243, 280
Rest, 367
Rhetoric, 210, 213; compared to economics in American universities, 10; in the law courts, 8
Righteousness. *See* Justice
Romantic love, in Greece, 63

Sacred love, 193
Sacred War, the, 145
Salvation, 280
Same, the, 367; and the Other, 399, 403
"School of Hellas," Athens as, 169
Science, Gorgias' view on, 31; philosophy and, 249; Socrates' lack of interest in, 59; *vs.* moral interests, 345, 350
Scientific hypotheses, Forms likened to, 311
Secondary education, Plato the father of, 461
Seeming, 56
Self-control, 70, 260

Self-knowledge, importance in Socrates' philosophy, 62
Self-sufficiency, Cynic doctrine of, 101, 111, 138
Sensation, 188
Sense, relation of Ideas to, 320–42
Sense-data, 35, 189, 191, 290, 292
Senses, unreliability of, 21
Sensible world, 373; relation to the Forms, 412; existence and nature, 466
Sex equality, 243
Sex love, 193
Sicilian cities, 30
Sicily, Plato's visits to, 160, 174, 177
Silphium plant, 116
Simmias, 48
Sin, 230; original, 326
Singing, ethical effect, 435
Skepticism, influences which gave rise to, 4; Plato and, 190; uses of, 1–2
Skeptics, and conduct, 25
Slavery, Cynic view of, 108
Slaves, treatment of, 440
Social contract theories, forerunners of, 219
Social life, exclusion of women from, 64
Socialism, Plato and, 255
Society, art and, 237; Plato's theories, 220
Socrates, 43–87; and the Cynic doctrine, 101; and the Periclean circle, 47; anti-democratic, 50; Antisthenes' lack of understanding of, 100; the Apostle of Apollo, 49; Aristippus' interpretation of, 121; courage in battle, 44; disagreement with materialistic view of the universe, 57; enjoyment of pleasure, 45, 120; failure to define the Good, 136, 137; first Athenian-born philosopher, 43; formal accusation and condemnation, 53; friends and admirers, 47; friendship with Plato, 151, 154; influence on Aristippus, 118; last moments, 55; legacy to his followers, 88; mission as a philosophic gadfly, 86; mysticism, 43, 46; personal characteristics, 44, 82; philosophical education, 46; philosophy, 320; Puritanism of, 279; search for a wiser man, 48; skepticism of, 57; two portraits, 82; unpopularity, 50; use of dialogue, 60; use of obstetric metaphors, 62; views on government, 51; weak spot in his ethics, 66
Socratic Dialogues, 182, 192, 198, 200, 204, 215, 244, 282; writing of, 157
Socratic Good, 316
Socratic philosophy, 56; conventional interpretation, 69; Euclid's attempt to fuse with Eleatic teachings, 90, 137; mystical interpretation, 73, 78; opposed interpretations, 68; Plato's interpretation, 58, 68, 73, 82; Pythagorean forms in, 73, 76, 79, 80, 84, 86
Soldiers, in the State, 221
Solid geometry, 251
Solon, 145
*Sophist,* 363
Sophistry, origin of term, 13
Sophists, 1–42; contemporary criticism of, 13; doctrines, 186, 187, 190, 205; education and, 150, 166; influence on Cynics and Cyrenaics, 122, 140; leaders not Athenian born, 14; loss of caste through charging fees, 15; qualified to give philosophical expression to tendencies of the age, 16; qualifications of, 11; summary of their theories, 41; theory of virtue, 24, 70
Sophocles, theory of suffering, 211
Soul, as a charioteer, 324; doctrine of Recollection, 208; essence of the, 331; justice and the, 218; love and the, 196, 197, 199; Orphic-Pythagorean doctrine of, 58, 76, 79, 200; parts of, 262; Platonic theory, 165, 337, 339, 359, 402, 403, 413, 420, 467; pleasure and the,

271; punishment of, 210; Pythagorean theory, 158
Space, 406
Sparta, at time of Plato, 142; government, 171, 256, 264; women of, 243, 245
Speusippus, 170, 179, 469; theory of pleasure, 282
Spinoza, views on immortality, 329
Spirit, 262
Standardization, 258
Star, Plato's poem to, 153
State, division into three parts, 79; Plato's theories of, 165, 220, 240, 438
*Statesman,* 288
Statesmanship, 425
Stilpo, 94
Stoics, 2; debt to Cynics, 110
Success, education for in Greece, 11
Suffering, glorification of, 211
Suffrage, 441
Suggestion, 231
Superfluous *vs.* the necessary, 113
Supra-sensible entities, 323
Survival, personal, 329, 332, 336
Symmetry, in moral life, 285
*Symposium,* 45, 69, 192
Synthetic judgments, 104
Syracuse, Dion's victory, 179; Plato's visits to, 160, 174, 177

Teachers, professional, 11
Teaching, prejudice against payment for, 14
Teleology, 418
Temperance, 260; foremost virtue, 435
*Theaetetus,* 21, 173, 281, 357; problem of knowledge in the, 361
Thebans, military use of passionate friendship, 65
Thebes, defeat of Sparta, 144
Theism, Plato's support of, 419
Theocracy, Plato's, 225
Theodorus, doctrines of, 130; friend of Protagoras, 118
Theology, Plato's, 393, 451
Things, 188. *See also* Images
Third man argument, 351
Thirty Tyrants, 44, 52, 148
Thought, objects of, 296; pleasures of, 272, 275
Thrasybulus, 154
Thrasymachus, 37, 39, 40, 69, 215, 216, 270, 272
Thurii, 18
*Timaeus,* 397
Time, 401
Timocracy, 264
Timoleon, 180
Town-meeting, Athenian, 7
Transmigration, Plato's doctrine of, 325, 330
Triangles in Plato's philosophy, 410
True, the, 345
True being, 325
Truth, 202; Socrates' view of, 80; Sophist views on, 56
Twiceness, 389, 405
"Two-story" view of the Forms, 310, 316, 327
Tyranny, 268, 429

Ugly, the, 345
Understanding, 294
United States, realism, 258
Unity, 354, 356
Universal brotherhood, 246
Universe, nature of, 57
University, Plato's, 169
Unlimited, the, 405
Unrighteousness. *See* Injustice
Utilitarianism, Anniceris as the remote progenitor of, 132
Utility as basis for morality, 70

Virtue as knowledge, 65, 68, 78; conventional interpretation of Socrates' views on, 69; the end of education, 67; Plato's philosophy, 190, 203, 207, 211, 259, 261; Sophists' conception of, 24, 70. *See also* Good
"Virtue for virtue's sake," Cynic doctrine of, 101, 138

Waves, Plato's, 243
Wealth, 241, 266
Wisdom, 284, 285; in the state, 259

Women, in Athens, 63, 245; in Sparta, 243, 245. *See also* Feminism
Words, ineffectiveness of, 34
World-body, 400
World-soul, 399, 400, 413, 421

Xantippe, 44
Xenocrates, 170, 177, 469
Xenophanes, 224
Xenophon, 48; Socrates' views expounded by, 68

Zeno, 95; dialectic of, 3, 59; on boundlessness, 32; paradoxes of, 93; Socrates and, 46

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